STS-118 / 13A.1

FD 08 Execute Package

MSG	Page(s)	Title
067A	1 - 15	FD08 Flight Plan Revision **(pdf)**
068	16 - 17	FD08 Mission Summary **(pdf)**
069A	18 - 20	FD08 Transfer Message **(pdf)**
070	---	FD07 MMT Summary **(pdf - Electronic Only)**
071B	21	LiOH Exchange Details **(pdf)**
072	---	FD09 Educational PAO Event Summary **(pdf - Electronic Only)**
073	22 - 24	WETA Alignment Guide Reclocking **(pdf)**

Approved by FAO: *Roger Smith*

Last Updated: Aug 15 2007 9:12AM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

MSG INDEX

1. For today's cryo config, H2 Tanks 2 and 5 will be active with dual heaters, while O2 Tank 1 will be active with dual heaters and O2 Tank 4 will be active with a single heater.

   R1 CRYO O2 MANF VLV TK1 - OP (tb-OP)
   H2 MANF VLV TK2 - OP (tb-OP)

2. Tracy & Rick: With the failure of the CO2 sensor in Rick's EMU (most likely from excessive moisture), Rick is now prime for CO2 detection. Rick, please recall your CO2 symptoms from your ground training so that you know what to watch for. Tracy, we would like you to prompt Rick every hour for a check for symptoms. After EVA PET 5:00, we would like those status checks every 30 minutes. We will be happy to provide reminders during the EVA if you like. Just let us know. Have a great EVA!

3. Dave: Due to the Batt over-temp error on PGT battery 1004 during the Post EVA 2 battery recharge, there are a few deltas to the Post EVA 3 procedure 1.605 BSA BATTERY RECHARGE to determine if the error was due to the battery or the battery charger. Also, for the rest of the mission use PGT battery 1004 in the spare PGT.

   1. Prior to step 1, examine the pins in the BSA on slot BC2, Channel 3 (the upper left PGT slot) and report results.
   2. On the STS-118 CONSUMABLES TRACKING CUE CARD (Back), BSA Battery Recharge block for FD 8:
      a. change PGT serial number 1004 to 1006 (BC 2, Ch 3)
      b. add PGT serial 1004 to the open slot below 1006 (BC 2, Ch 5)

4. With the possibility of extending the flight, the PD would like to know how quickly the CBTM water is being used to help assess the impact of extended ops with this experiment.

5. The table below summarizes the Shuttle and ISS exercise constraints for today. These constraints are also noted in your timelines for your reference.

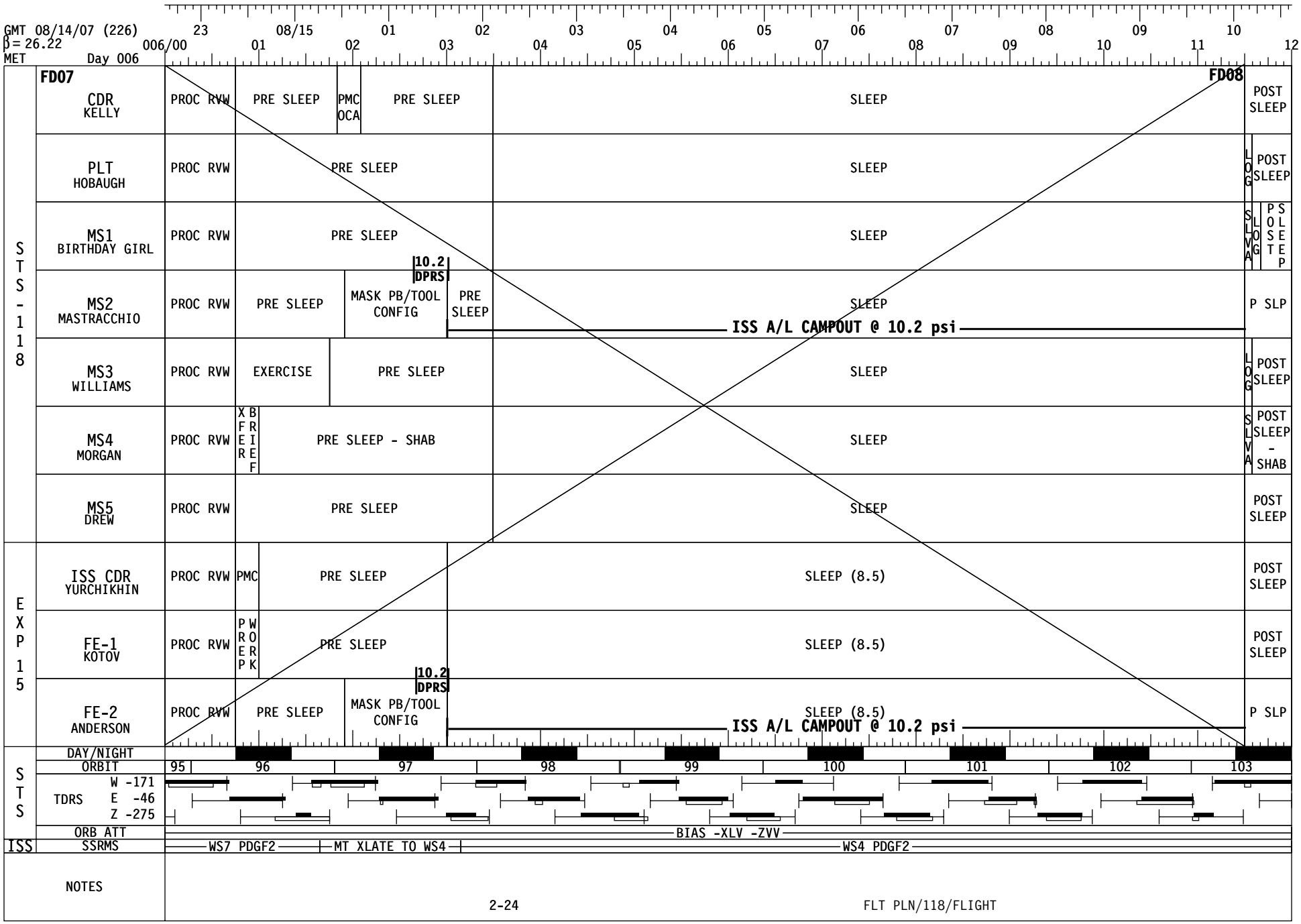
Activity	Exercise Constraints	
	Shuttle	ISS
EVA 3	No exercise during APFR Ops for XPDR/BSP install	No unisolated exercise during APFR Ops for XPDR/BSP install

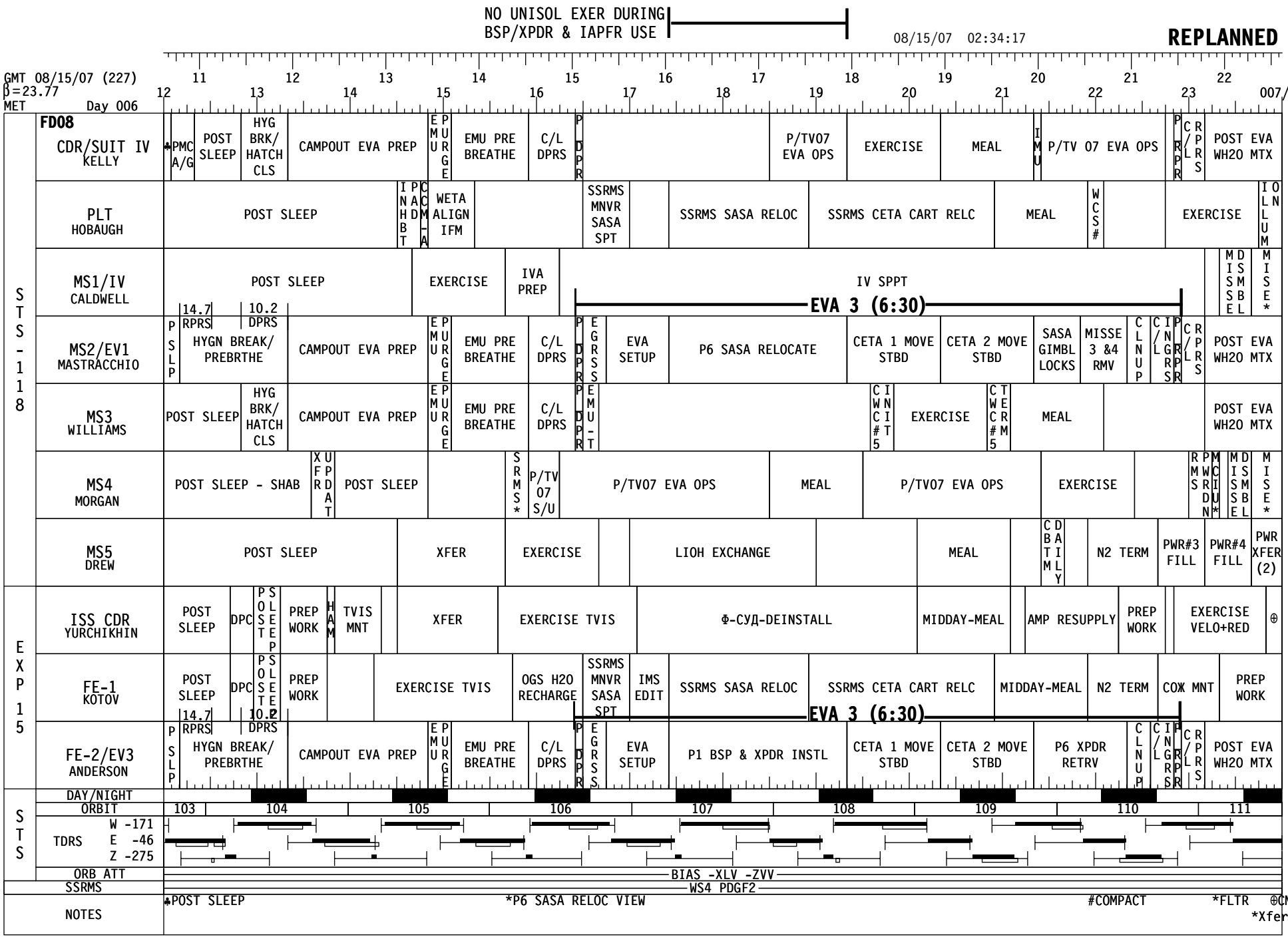
6. Last night, the MT translation was aborted due to Translation Drive Overspeed error when the MT was between WS5 and WS4. The telemetry indicated that the MT software (in the EXT MDM) detected the MT translation drive moving faster than expected and commanded the TD IMCA to stop. We were able to get the MT to WS4 using manual translation commands. The MT is now latched and mated at WS4 and ready for the EVA.

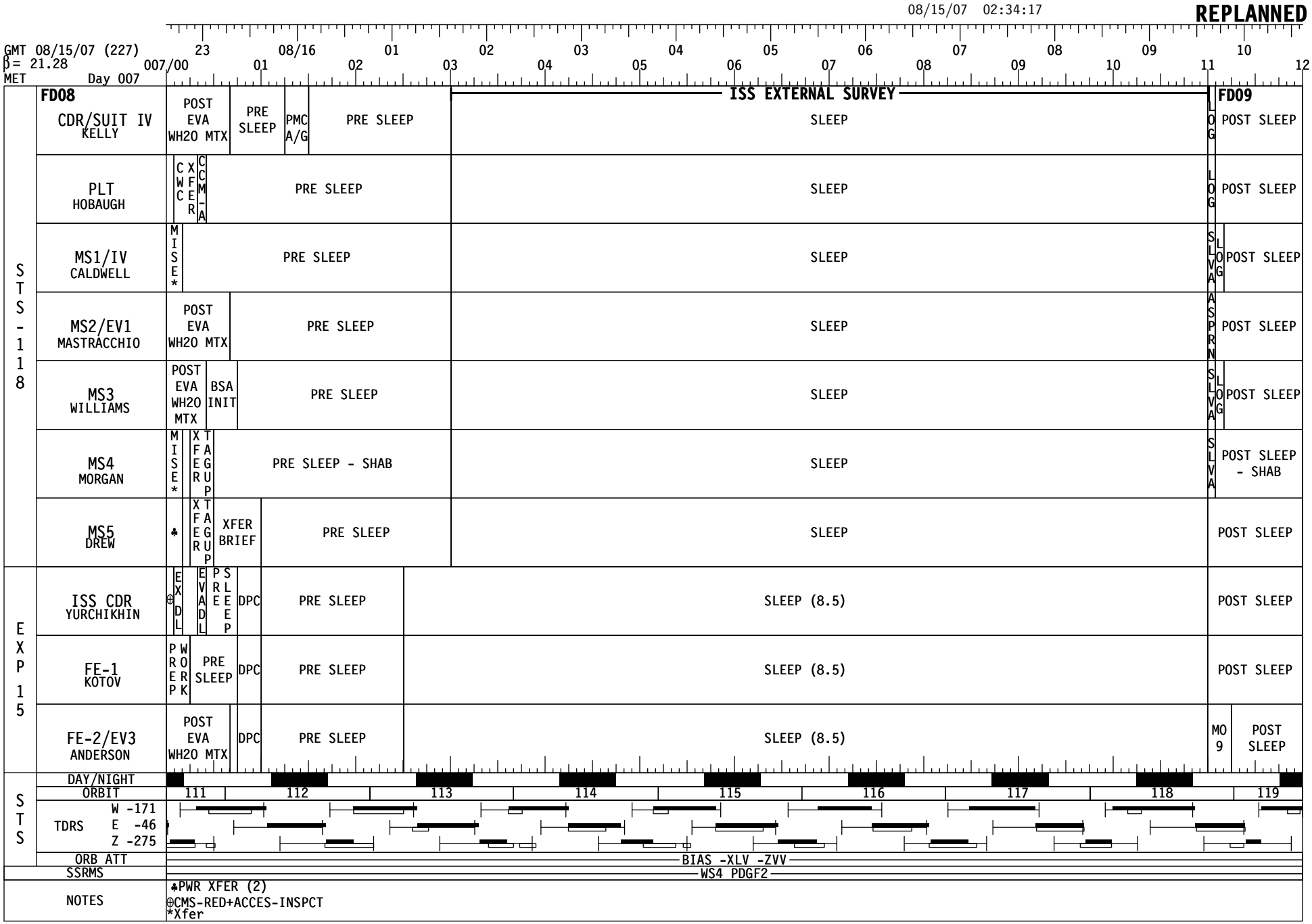
   The cause of the overspeed condition is unclear at this time but it appears to be a transient condition since we were able to continue the translation using the same drive string.

7. There are no SPACEHAB viewport violations for FD08.

8. REPLACE PAGES 2-24, 2-26, 2-28 AND 3-78 THROUGH 3-87.


GMT 08/14/07 (226)
β = 26.22
MET Day 006
006/00
08/15
FD07
FD08
CDR KELLY
PLT HOBAUGH
MS1 BIRTHDAY GIRL
MS2 MASTRACCHIO
MS3 WILLIAMS
MS4 MORGAN
MS5 DREW
ISS CDR YURCHIKHIN
FE-1 KOTOV
FE-2 ANDERSON
PROC RVW
PRE SLEEP
PMC
OCA
SLEEP
POST SLEEP
LOG
SLVA
P SLEEP
10.2 DPRS
MASK PB/TOOL CONFIG
ISS A/L CAMPOUT @ 10.2 psi
EXERCISE
XFER
BRIEF
PRE SLEEP - SHAB
PWR OFF
SLEEP (8.5)
STS-118
EXP 15
DAY/NIGHT
ORBIT
95
96
97
98
99
100
101
102
103
TDRS
W -171
E -46
Z -275
ORB ATT
BIAS -XLV -ZVV
ISS
SSRMS
WS7 PDGF2
MT XLATE TO WS4
WS4 PDGF2
NOTES


NO UNISOL EXER DURING BSP/XPDR & IAPFR USE
08/15/07 02:34:17
REPLANNED
GMT 08/15/07 (227)
β=23.77
MET Day 006
11 12 13 14 15 16 17 18 19 20 21 22 23
12 13 14 15 16 17 18 19 20 21 22 23 007/00
STS-118
FD08
CDR/SUIT IV KELLY
PLT HOBAUGH
MS1/IV CALDWELL
MS2/EV1 MASTRACCHIO
MS3 WILLIAMS
MS4 MORGAN
MS5 DREW
EXP 15
ISS CDR YURCHIKHIN
FE-1 KOTOV
FE-2/EV3 ANDERSON
POST SLEEP
EXERCISE
IVA PREP
IV SPPT
EVA 3 (6:30)
CAMPOUT EVA PREP
EMU PRE BREATHE
C/L DPRS
EVA SETUP
P6 SASA RELOCATE
CETA 1 MOVE STBD
CETA 2 MOVE STBD
MEAL
P/TV07 EVA OPS
P/TV 07 EVA OPS
POST EVA WH2O MTX
XFER
LIOH EXCHANGE
N2 TERM
EXERCISE TVIS
Ф-СУД-DEINSTALL
MIDDAY-MEAL
AMP RESUPPLY
PREP WORK
EXERCISE VELO+RED
OGS H2O RECHARGE
IMS EDIT
SSRMS SASA RELOC
SSRMS CETA CART RELC
P1 BSP & XPDR INSTL
P6 XPDR RETRV
DAY/NIGHT
ORBIT 103 104 105 106 107 108 109 110 111
TDRS W -171 E -46 Z -275
ORB ATT BIAS -XLV -ZVV
SSRMS WS4 PDGF2
NOTES
♣POST SLEEP
*P6 SASA RELOC VIEW
#COMPACT
*FLTR
⊕CMS-RED+A
*Xfer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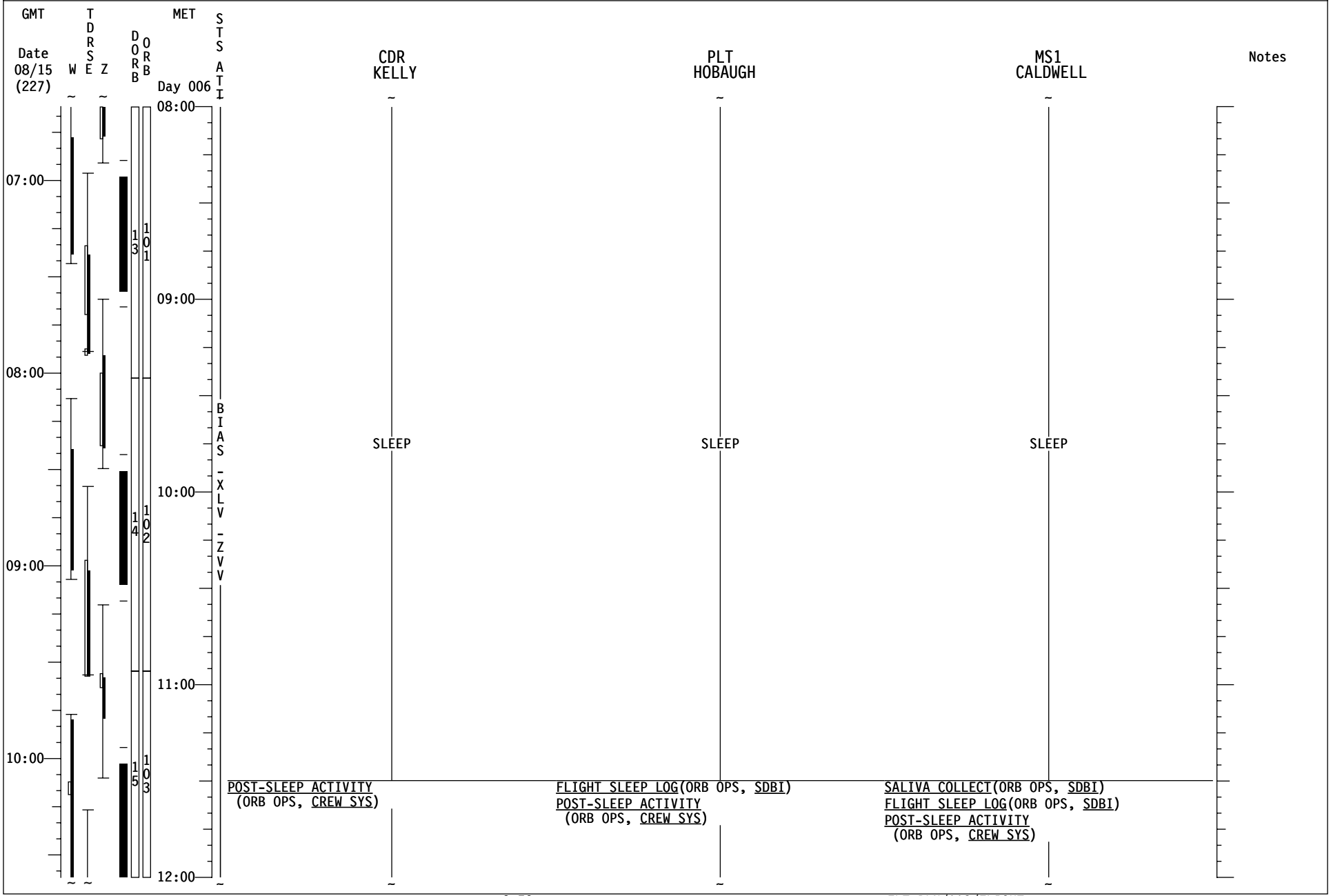
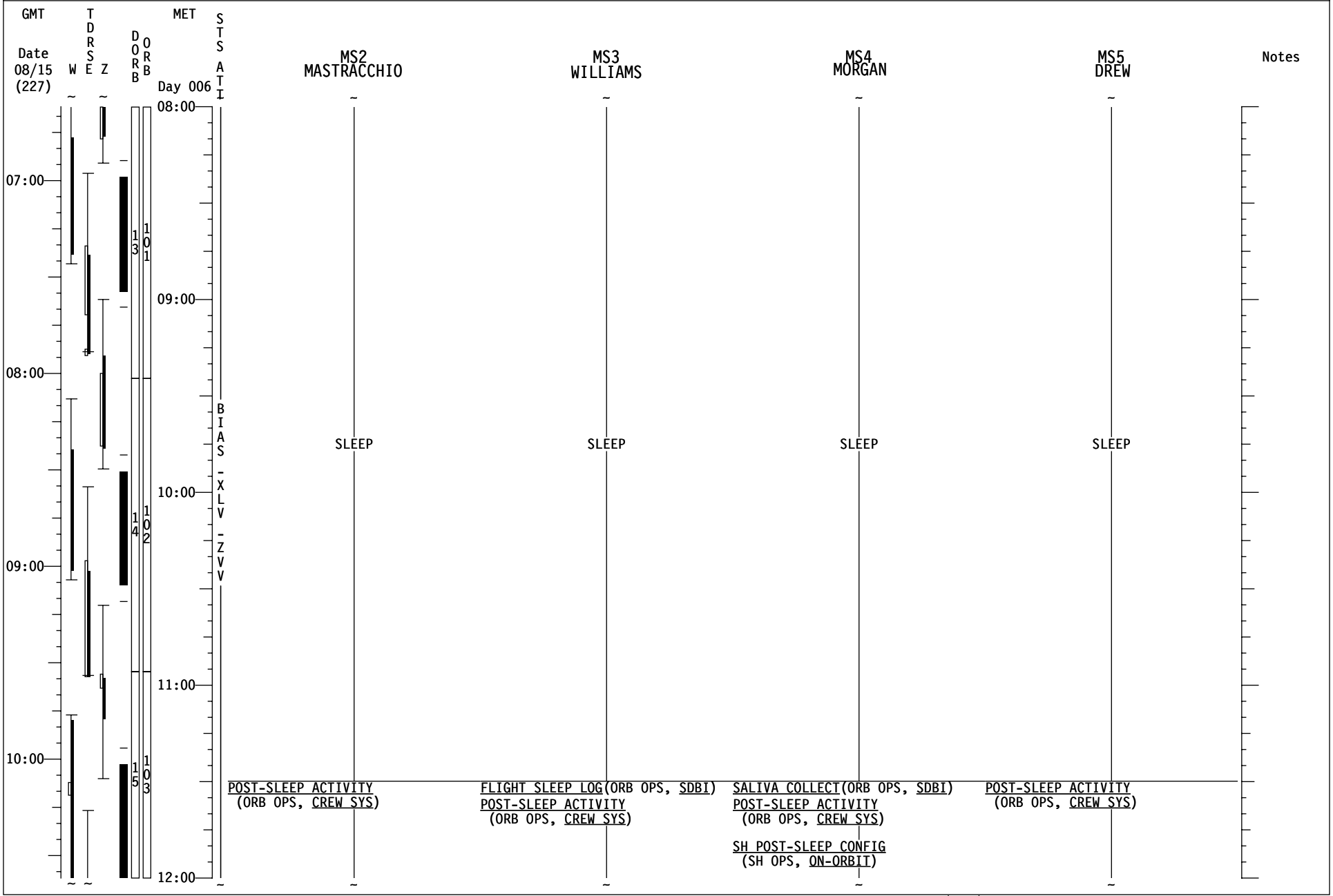
MET 007/00 Day 007
23 08/16 01 02 03 04 05 06 07 08 09 10 11 12
FD08
FD09
ISS EXTERNAL SURVEY
STS-118
CDR/SUIT IV KELLY
POST EVA WH2O MTX
PRE SLEEP
PMC A/G
PRE SLEEP
SLEEP
LOG
POST SLEEP
PLT HOBAUGH
CWC
XFER
CCM-A
PRE SLEEP
SLEEP
LOG
POST SLEEP
MS1/IV CALDWELL
MISE*
PRE SLEEP
SLEEP
SLVA
LOG
POST SLEEP
MS2/EV1 MASTRACCHIO
POST EVA WH2O MTX
PRE SLEEP
SLEEP
ASPRN
POST SLEEP
MS3 WILLIAMS
POST EVA WH2O MTX
BSA INIT
PRE SLEEP
SLEEP
SLVA
LOG
POST SLEEP
MS4 MORGAN
MISE*
XFER
TAGUP
PRE SLEEP - SHAB
SLEEP
SLVA
POST SLEEP - SHAB
MS5 DREW
♣
XFER
TAGUP
XFER BRIEF
PRE SLEEP
SLEEP
POST SLEEP
EXP15
ISS CDR YURCHIKHIN
⊕EXDL
EVADL
PRSLEEP
DPC
PRE SLEEP
SLEEP (8.5)
POST SLEEP
FE-1 KOTOV
PREP
WORK
PRE SLEEP
DPC
PRE SLEEP
SLEEP (8.5)
POST SLEEP
FE-2/EV3 ANDERSON
POST EVA WH2O MTX
DPC
PRE SLEEP
SLEEP (8.5)
MO 9
POST SLEEP
DAY/NIGHT
ORBIT 111 112 113 114 115 116 117 118 119
STS
TDRS W -171 E -46 Z -275
ORB ATT
BIAS -XLV -ZVV
SSRMS
WS4 PDGF2
NOTES
♣PWR XFER (2)
⊕CMS-RED+ACCES-INSPCT
*Xfer

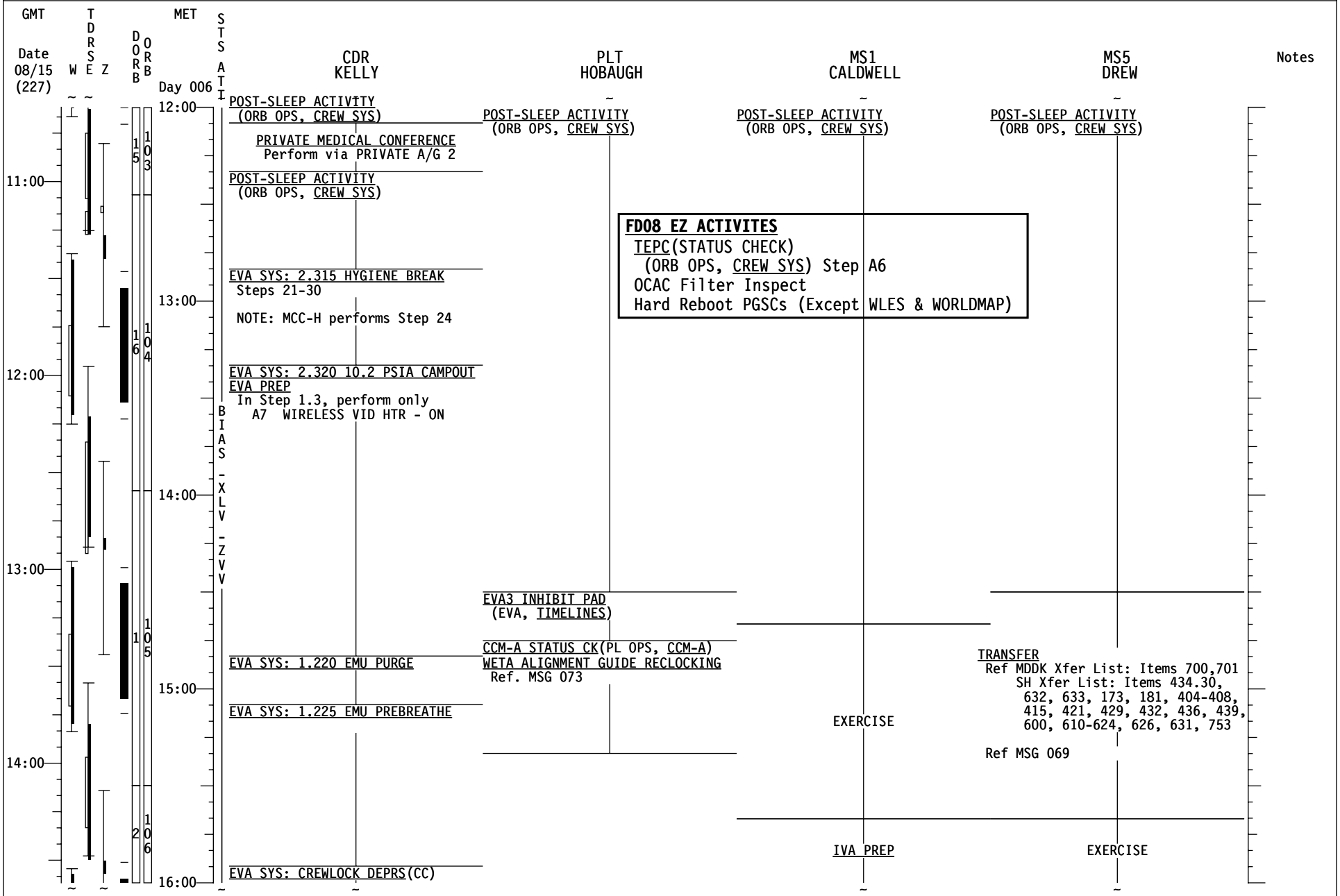
STS-118 FD08


GMT
Date
08/15
(227)
W
TDRSE
Z
DORB
13
14
15
ORB
101
102
103
MET
Day 006
STSATI
08:00
09:00
10:00
11:00
12:00
07:00
08:00
09:00
10:00
BIAS -XLV -ZVV
CDR
KELLY
PLT
HOBAUGH
MS1
CALDWELL
Notes
SLEEP
SLEEP
SLEEP
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
FLIGHT SLEEP LOG(ORB OPS, SDBI)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
SALIVA COLLECT(ORB OPS, SDBI)
FLIGHT SLEEP LOG(ORB OPS, SDBI)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

STS-118 FD08


GMT
Date
08/15
(227)
W
TDRSE
Z
DORB
13
14
15
ORB
101
102
103
MET
Day 006
STS ATI
08:00
09:00
10:00
11:00
12:00
07:00
08:00
09:00
10:00
BIAS -XLV -ZVV
MS2
MASTRACCHIO
MS3
WILLIAMS
MS4
MORGAN
MS5
DREW
Notes
SLEEP
SLEEP
SLEEP
SLEEP
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
FLIGHT SLEEP LOG(ORB OPS, SDBI)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
SALIVA COLLECT(ORB OPS, SDBI)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
SH POST-SLEEP CONFIG
(SH OPS, ON-ORBIT)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

STS-118 FD08


GMT
Date
08/15
(227)
W
T D R S
E
Z
D O R B
O R B
MET
Day 006
STS ATI
BIAS-XLV-ZVV
CDR
KELLY
PLT
HOBAUGH
MS1
CALDWELL
MS5
DREW
Notes
12:00
11:00
13:00
12:00
14:00
13:00
15:00
14:00
16:00
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
PRIVATE MEDICAL CONFERENCE
Perform via PRIVATE A/G 2
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
EVA SYS: 2.315 HYGIENE BREAK
Steps 21-30
NOTE: MCC-H performs Step 24
EVA SYS: 2.320 10.2 PSIA CAMPOUT
EVA PREP
In Step 1.3, perform only
A7 WIRELESS VID HTR - ON
EVA SYS: 1.220 EMU PURGE
EVA SYS: 1.225 EMU PREBREATHE
EVA SYS: CREWLOCK DEPRS(CC)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
FD08 EZ ACTIVITES
TEPC(STATUS CHECK)
(ORB OPS, CREW SYS) Step A6
OCAC Filter Inspect
Hard Reboot PGSCs (Except WLES & WORLDMAP)
EVA3 INHIBIT PAD
(EVA, TIMELINES)
CCM-A STATUS CK(PL OPS, CCM-A)
WETA ALIGNMENT GUIDE RECLOCKING
Ref. MSG 073
EXERCISE
IVA PREP
TRANSFER
Ref MDDK Xfer List: Items 700,701
SH Xfer List: Items 434.30,
632, 633, 173, 181, 404-408,
415, 421, 429, 432, 436, 439,
600, 610-624, 626, 631, 753
Ref MSG 069
EXERCISE
15
16
1
2
103
104
105
106

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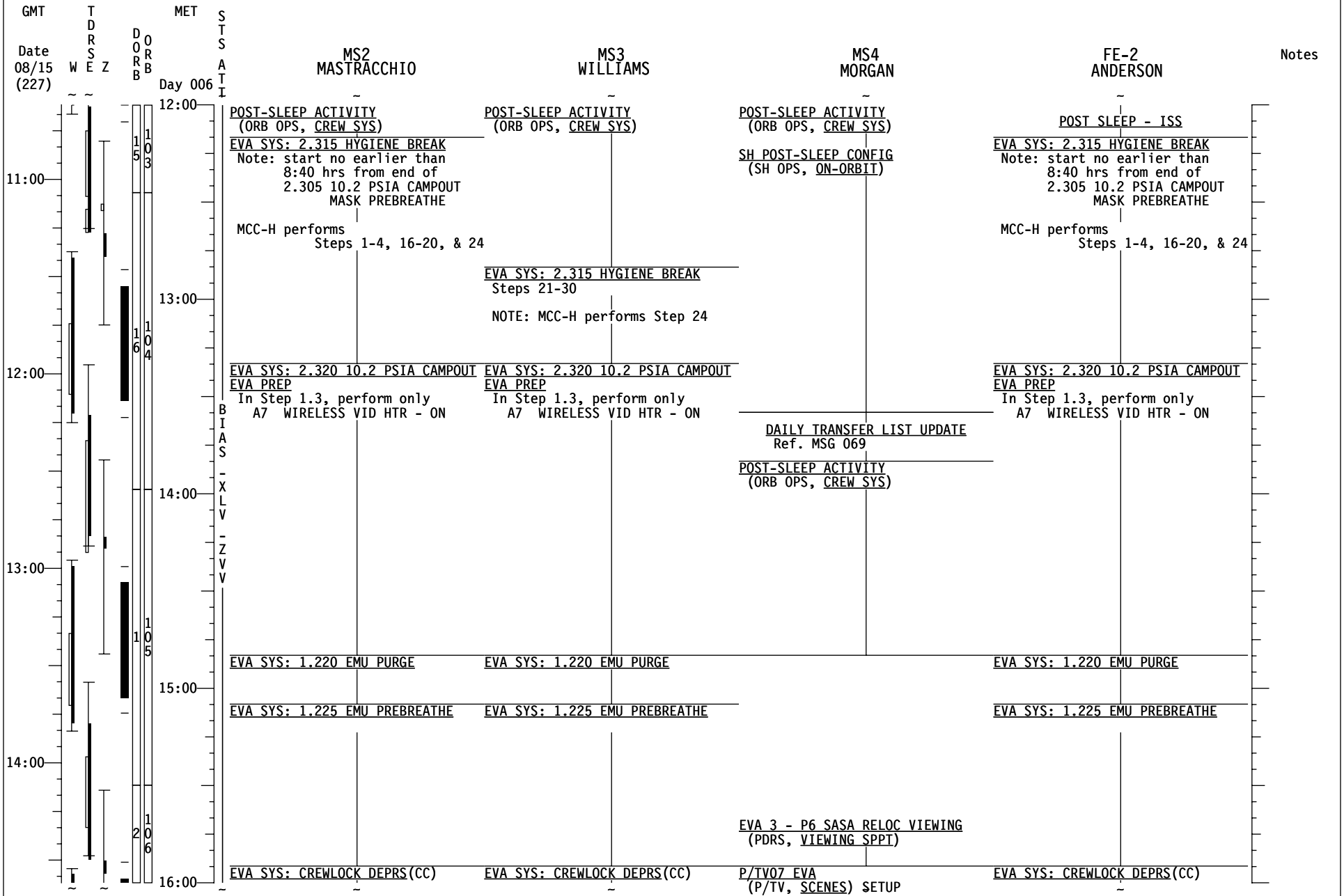
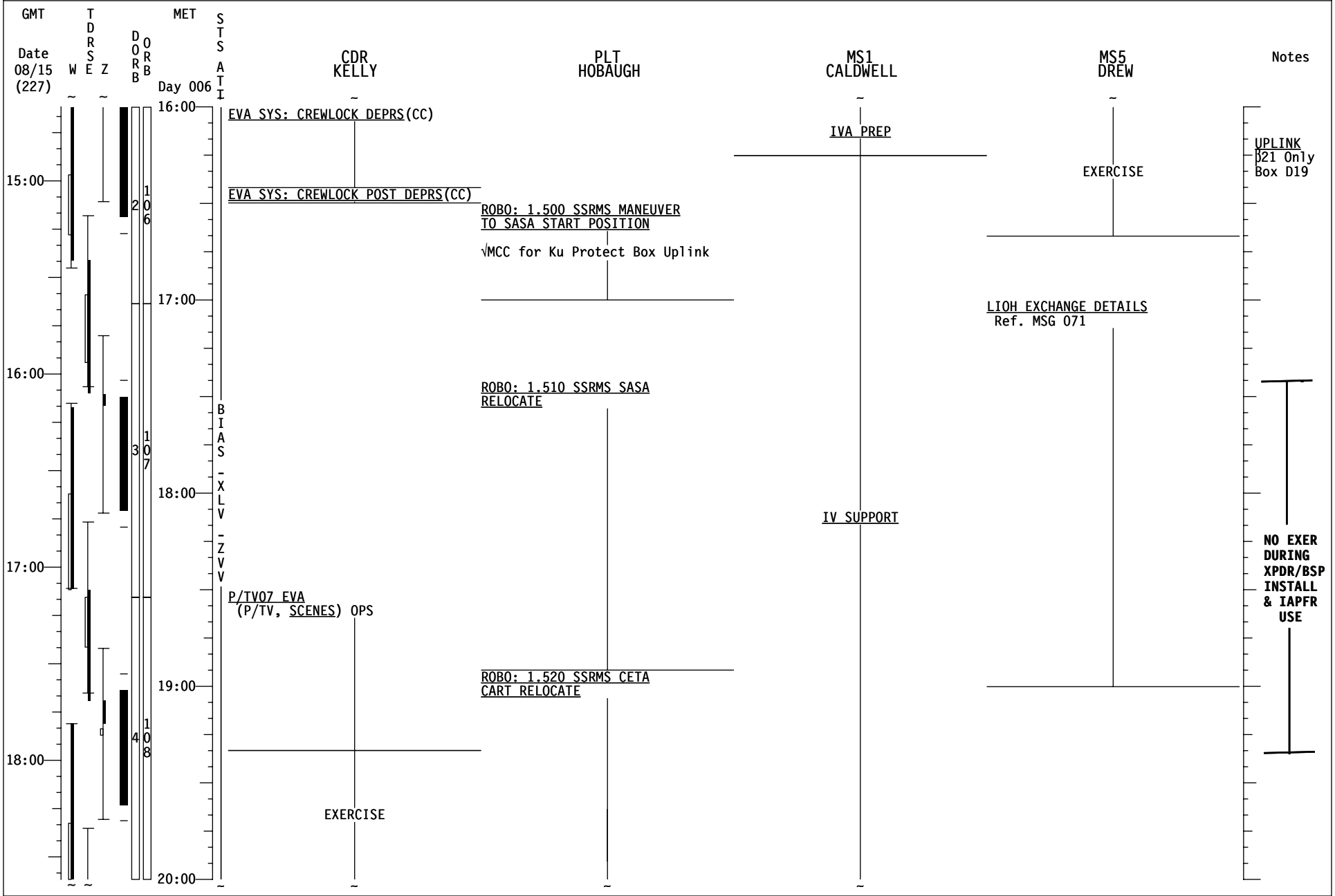

GMT
Date
08/15
(227)
W
TDRS E
TDRS Z
DOR B
ORB
MET
Day 006
STS ATI
MS2
MASTRACCHIO
MS3
WILLIAMS
MS4
MORGAN
FE-2
ANDERSON
Notes
12:00
11:00
13:00
12:00
14:00
13:00
15:00
14:00
16:00
BIAS -XLV -ZVV
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
EVA SYS: 2.315 HYGIENE BREAK
Note: start no earlier than
8:40 hrs from end of
2.305 10.2 PSIA CAMPOUT
MASK PREBREATHE
MCC-H performs
Steps 1-4, 16-20, & 24
EVA SYS: 2.315 HYGIENE BREAK
Steps 21-30
NOTE: MCC-H performs Step 24
SH POST-SLEEP CONFIG
(SH OPS, ON-ORBIT)
POST SLEEP - ISS
EVA SYS: 2.320 10.2 PSIA CAMPOUT
EVA PREP
In Step 1.3, perform only
A7 WIRELESS VID HTR - ON
DAILY TRANSFER LIST UPDATE
Ref. MSG 069
EVA SYS: 1.220 EMU PURGE
EVA SYS: 1.225 EMU PREBREATHE
EVA 3 - P6 SASA RELOC VIEWING
(PDRS, VIEWING SPPT)
EVA SYS: CREWLOCK DEPRS(CC)
P/TVO7 EVA
(P/TV, SCENES) SETUP

STS-118 FD08


GMT
Date
08/15
(227)
W
TDRS E
Z
DOR B
ORB
MET
Day 006
STS ATI
CDR
KELLY
PLT
HOBAUGH
MS1
CALDWELL
MS5
DREW
Notes
16:00
17:00
18:00
19:00
20:00
15:00
16:00
17:00
18:00
2
3
4
106
107
108
BIAS -XLV -ZVV
EVA SYS: CREWLOCK DEPRS(CC)
EVA SYS: CREWLOCK POST DEPRS(CC)
ROBO: 1.500 SSRMS MANEUVER TO SASA START POSITION
√MCC for Ku Protect Box Uplink
ROBO: 1.510 SSRMS SASA RELOCATE
ROBO: 1.520 SSRMS CETA CART RELOCATE
P/TV07 EVA
(P/TV, SCENES) OPS
EXERCISE
IVA PREP
IV SUPPORT
EXERCISE
LIOH EXCHANGE DETAILS
Ref. MSG 071
UPLINK
Q21 Only
Box D19
NO EXER DURING XPDR/BSP INSTALL & IAPFR USE

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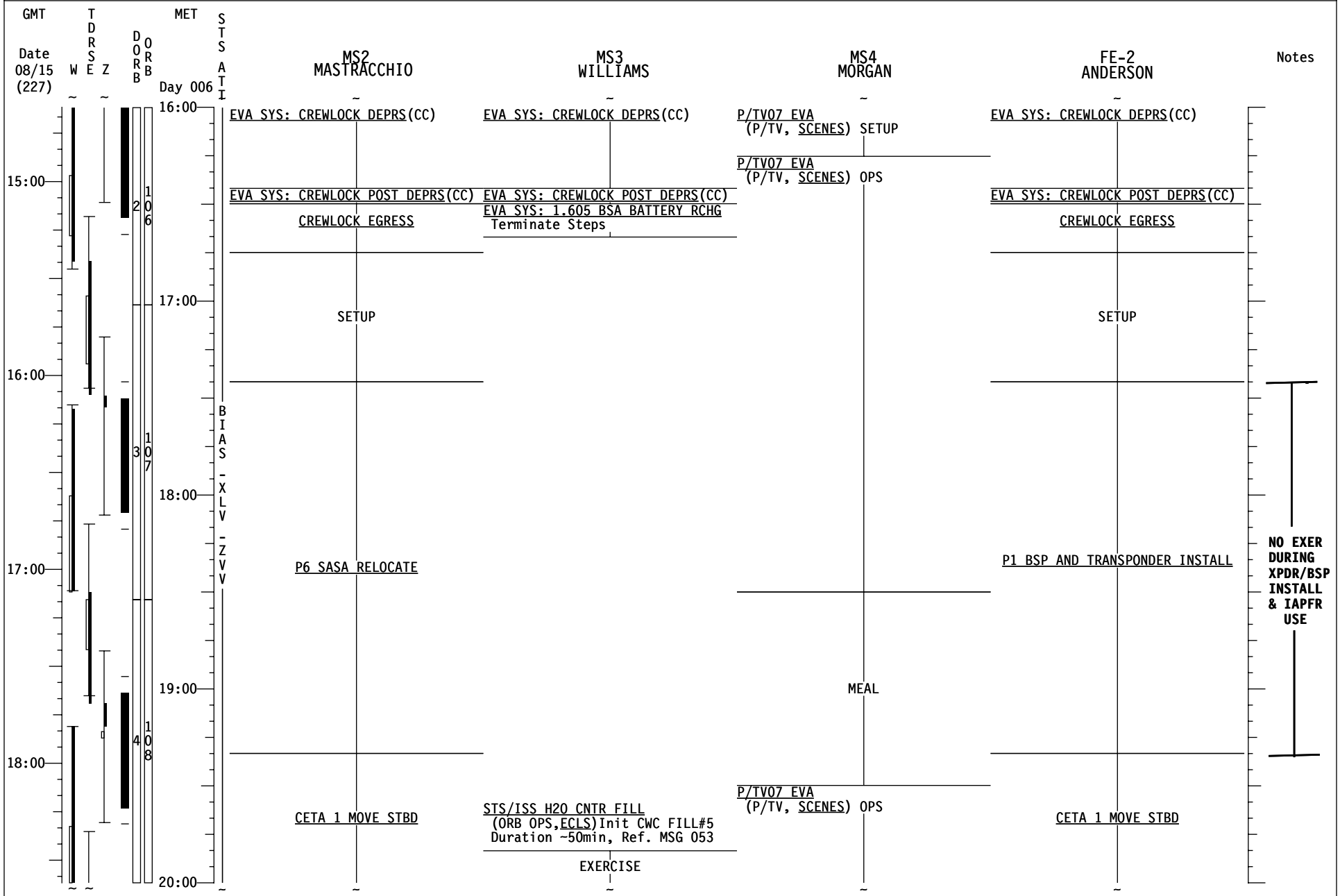
GMT
Date
08/15
(227)
W
TDRSE
Z
DORB
ORB
MET
Day 006
STS ATI
MS2
MASTRACCHIO
MS3
WILLIAMS
MS4
MORGAN
FE-2
ANDERSON
Notes
16:00
17:00
18:00
19:00
20:00
15:00
16:00
17:00
18:00
2
3
4
106
107
108
BIAS-XLV-ZVV
EVA SYS: CREWLOCK DEPRS(CC)
EVA SYS: CREWLOCK POST DEPRS(CC)
CREWLOCK EGRESS
SETUP
P6 SASA RELOCATE
CETA 1 MOVE STBD
EVA SYS: CREWLOCK DEPRS(CC)
EVA SYS: CREWLOCK POST DEPRS(CC)
EVA SYS: 1.605 BSA BATTERY RCHG
Terminate Steps
STS/ISS H2O CNTR FILL
(ORB OPS,ECLS)Init CWC FILL#5
Duration ~50min, Ref. MSG 053
EXERCISE
P/TVO7 EVA
(P/TV, SCENES) SETUP
P/TVO7 EVA
(P/TV, SCENES) OPS
MEAL
P/TVO7 EVA
(P/TV, SCENES) OPS
EVA SYS: CREWLOCK DEPRS(CC)
EVA SYS: CREWLOCK POST DEPRS(CC)
CREWLOCK EGRESS
SETUP
P1 BSP AND TRANSPONDER INSTALL
CETA 1 MOVE STBD
NO EXER
DURING
XPDR/BSP
INSTALL
& IAPFR
USE

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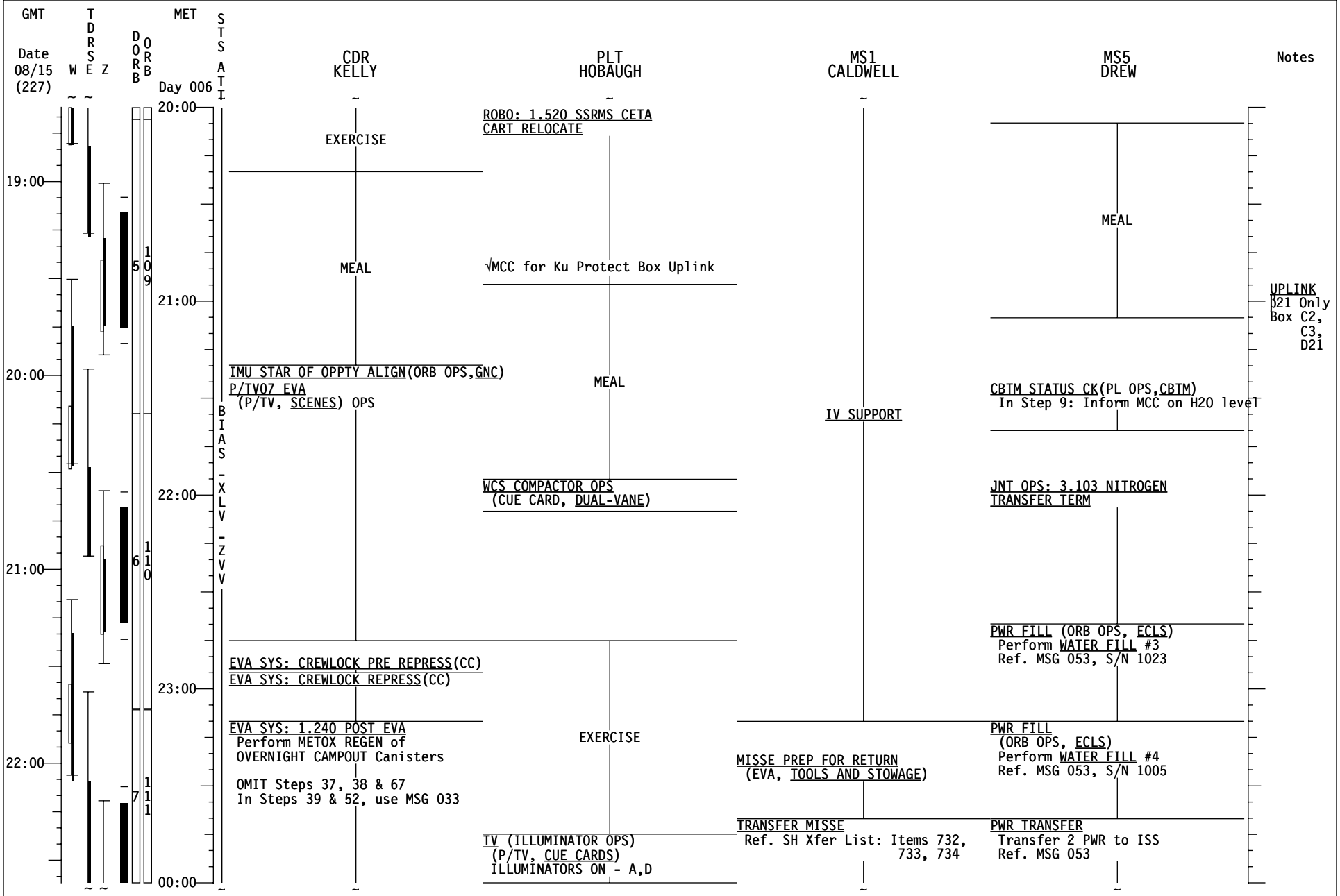
GMT
Date
08/15
(227)
TDRS W
TDRS E
TDRS Z
DOB
ORB
MET
Day 006
STS ATI
BIAS-XLV-ZVV
CDR
KELLY
PLT
HOBAUGH
MS1
CALDWELL
MS5
DREW
Notes
19:00
20:00
21:00
22:00
23:00
00:00
EXERCISE
MEAL
IMU STAR OF OPPTY ALIGN(ORB OPS,GNC)
P/TVO7 EVA
(P/TV, SCENES) OPS
EVA SYS: CREWLOCK PRE REPRESS(CC)
EVA SYS: CREWLOCK REPRESS(CC)
EVA SYS: 1.240 POST EVA
Perform METOX REGEN of
OVERNIGHT CAMPOUT Canisters
OMIT Steps 37, 38 & 67
In Steps 39 & 52, use MSG 033
ROBO: 1.520 SSRMS CETA
CART RELOCATE
√MCC for Ku Protect Box Uplink
MEAL
WCS COMPACTOR OPS
(CUE CARD, DUAL-VANE)
EXERCISE
TV (ILLUMINATOR OPS)
(P/TV, CUE CARDS)
ILLUMINATORS ON - A,D
IV SUPPORT
MISSE PREP FOR RETURN
(EVA, TOOLS AND STOWAGE)
TRANSFER MISSE
Ref. SH Xfer List: Items 732,
733, 734
MEAL
CBTM STATUS CK(PL OPS,CBTM)
In Step 9: Inform MCC on H2O level
JNT OPS: 3.103 NITROGEN
TRANSFER TERM
PWR FILL (ORB OPS, ECLS)
Perform WATER FILL #3
Ref. MSG 053, S/N 1023
PWR FILL
(ORB OPS, ECLS)
Perform WATER FILL #4
Ref. MSG 053, S/N 1005
PWR TRANSFER
Transfer 2 PWR to ISS
Ref. MSG 053
UPLINK
D21 Only
Box C2,
C3,
D21

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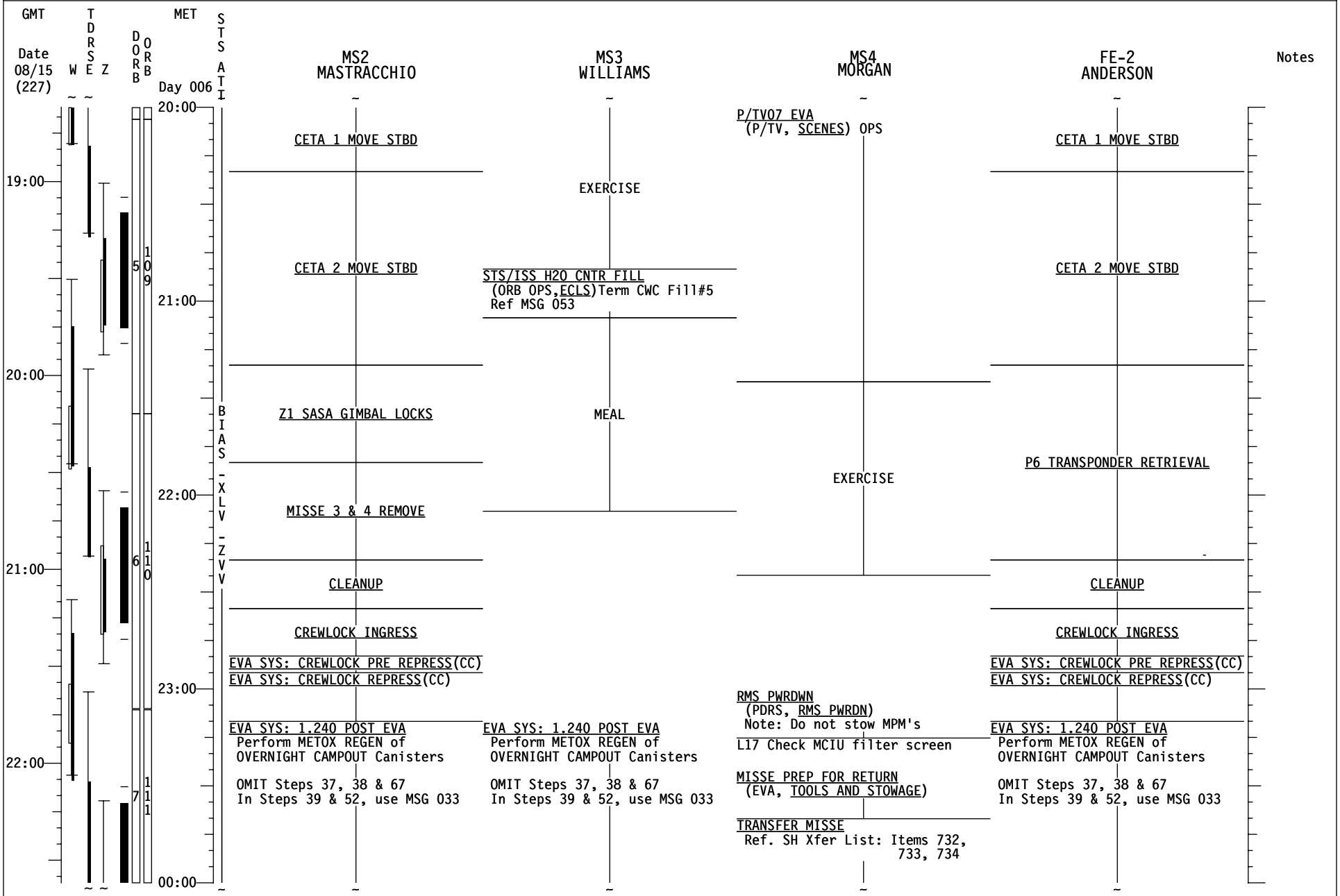
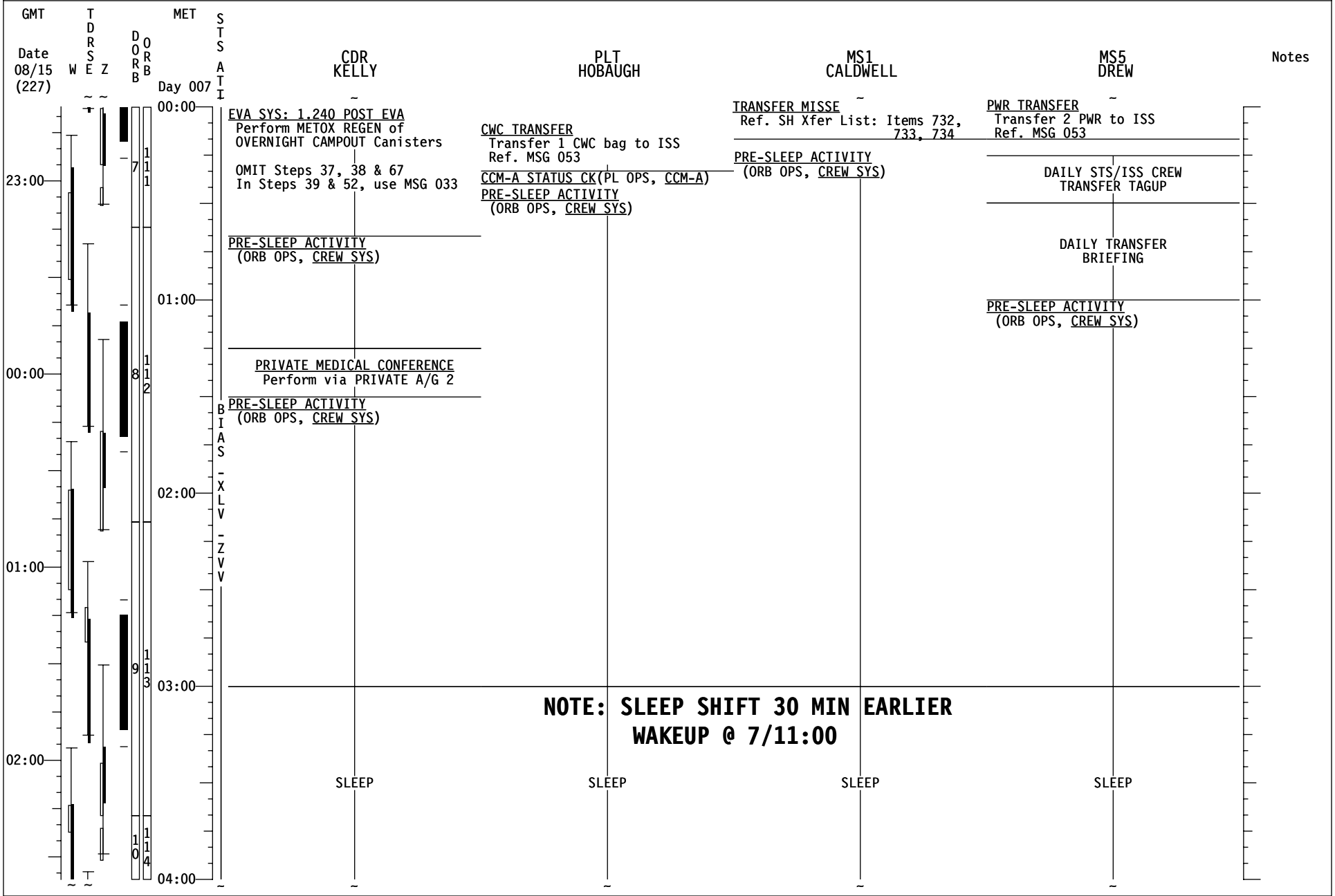
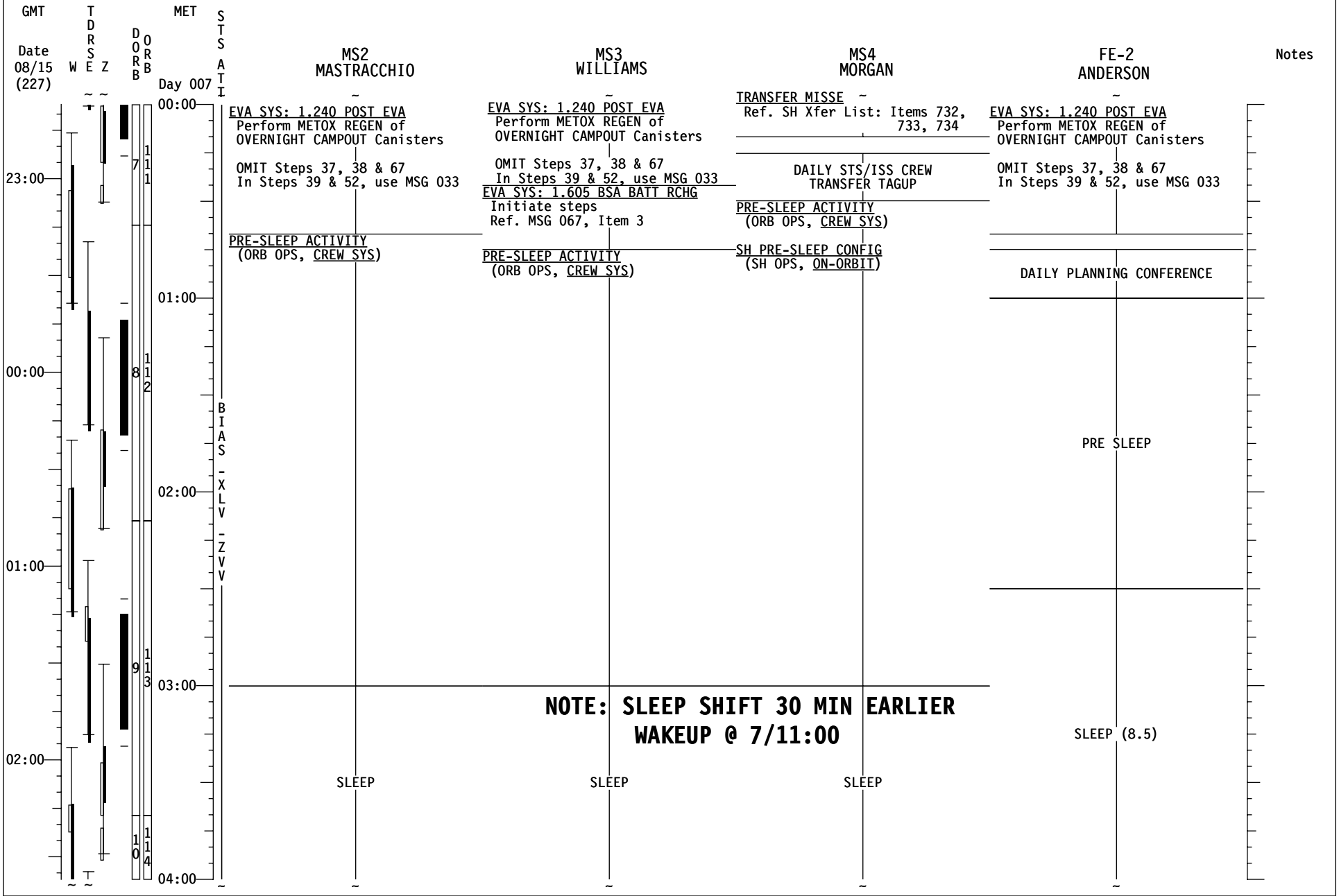

GMT
Date
08/15
(227)
W
TDRSE
Z
DOR B
ORB
MET
Day 006
STS ATI
BIAS -XLV -ZVV
20:00
19:00
21:00
20:00
22:00
21:00
23:00
22:00
00:00
5
7
6
7
109
110
111
MS2
MASTRACCHIO
CETA 1 MOVE STBD
CETA 2 MOVE STBD
Z1 SASA GIMBAL LOCKS
MISSE 3 & 4 REMOVE
CLEANUP
CREWLOCK INGRESS
EVA SYS: CREWLOCK PRE REPRESS(CC)
EVA SYS: CREWLOCK REPRESS(CC)
EVA SYS: 1.24O POST EVA
Perform METOX REGEN of
OVERNIGHT CAMPOUT Canisters
OMIT Steps 37, 38 & 67
In Steps 39 & 52, use MSG 033
MS3
WILLIAMS
EXERCISE
STS/ISS H2O CNTR FILL
(ORB OPS,ECLS)Term CWC Fill#5
Ref MSG 053
MEAL
EVA SYS: 1.24O POST EVA
Perform METOX REGEN of
OVERNIGHT CAMPOUT Canisters
OMIT Steps 37, 38 & 67
In Steps 39 & 52, use MSG 033
MS4
MORGAN
P/TVO7 EVA
(P/TV, SCENES) OPS
EXERCISE
RMS PWRDWN
(PDRS, RMS PWRDN)
Note: Do not stow MPM's
L17 Check MCIU filter screen
MISSE PREP FOR RETURN
(EVA, TOOLS AND STOWAGE)
TRANSFER MISSE
Ref. SH Xfer List: Items 732,
733, 734
FE-2
ANDERSON
CETA 1 MOVE STBD
CETA 2 MOVE STBD
P6 TRANSPONDER RETRIEVAL
CLEANUP
CREWLOCK INGRESS
EVA SYS: CREWLOCK PRE REPRESS(CC)
EVA SYS: CREWLOCK REPRESS(CC)
EVA SYS: 1.24O POST EVA
Perform METOX REGEN of
OVERNIGHT CAMPOUT Canisters
OMIT Steps 37, 38 & 67
In Steps 39 & 52, use MSG 033
Notes

STS-118 FD08


GMT
Date
08/15
(227)
W
TDRS E
TDRS Z
DOB
ORB
MET
Day 007
STS ATI
CDR
KELLY
PLT
HOBAUGH
MS1
CALDWELL
MS5
DREW
Notes
23:00
00:00
01:00
02:00
03:00
04:00
BIAS-XLV-ZVV
7
8
9
10
111
112
113
114
EVA SYS: 1.240 POST EVA
Perform METOX REGEN of
OVERNIGHT CAMPOUT Canisters
OMIT Steps 37, 38 & 67
In Steps 39 & 52, use MSG 033
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
PRIVATE MEDICAL CONFERENCE
Perform via PRIVATE A/G 2
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
SLEEP
CWC TRANSFER
Transfer 1 CWC bag to ISS
Ref. MSG 053
CCM-A STATUS CK(PL OPS, CCM-A)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
SLEEP
TRANSFER MISSE
Ref. SH Xfer List: Items 732,
733, 734
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
SLEEP
PWR TRANSFER
Transfer 2 PWR to ISS
Ref. MSG 053
DAILY STS/ISS CREW
TRANSFER TAGUP
DAILY TRANSFER
BRIEFING
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
SLEEP
NOTE: SLEEP SHIFT 30 MIN EARLIER
WAKEUP @ 7/11:00

STS-118 FD08


GMT
Date
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BIAS -XLV -ZVV
7
8
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10
111
112
113
114
MS2
MASTRACCHIO
MS3
WILLIAMS
MS4
MORGAN
FE-2
ANDERSON
Notes
EVA SYS: 1.240 POST EVA
Perform METOX REGEN of
OVERNIGHT CAMPOUT Canisters
OMIT Steps 37, 38 & 67
In Steps 39 & 52, use MSG 033
EVA SYS: 1.605 BSA BATT RCHG
Initiate steps
Ref. MSG 067, Item 3
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
TRANSFER MISSE
Ref. SH Xfer List: Items 732, 733, 734
DAILY STS/ISS CREW
TRANSFER TAGUP
SH PRE-SLEEP CONFIG
(SH OPS, ON-ORBIT)
DAILY PLANNING CONFERENCE
PRE SLEEP
SLEEP (8.5)
SLEEP
NOTE: SLEEP SHIFT 30 MIN EARLIER
WAKEUP @ 7/11:00

Good Morning Endeavour!

Excellent job on the ESP3 install yesterday. Equally impressive was the ease with which you managed to manually damp rates on a stack which weighs in at a hefty 732,000 lbs. There were plenty of smiling faces and the prop usage was well below expectations. It was a great press conference and education event yesterday, too....we're glad you're taking some time to enjoy ISS!

The MCC was also treated to some fine cuisine compliments of your spouses. Please thank them for their hospitality.

We're looking forward to EVA3 today. All the best to Rick and Clay.

Work is progressing nicely on the debris assessment. To summarize the debris portion of the MMT, two cases have been analyzed: one in which the tile void does not extend to the filler bar and one in which it does. Both results have thus far been favorable with maximum structural temperatures reaching 268 and 325 degrees respectively (with a structural limit of 350 deg). This analysis will, of course, be cross checked with Arc Jet runs which are ongoing.

Consensus is growing for holding off until FD11 for EVA4 regardless of whether a repair is necessary or not. This will lend additional flexibility to the analysis and still permit undocking on FD13 if a repair is not necessary. You can expect a final decision after the FD8 MMT.

Keep up the great work!

YOUR CURRENT ORBIT IS: 186 x 183 NM

<u>NOTAMS:</u>

EDW – EDWARDS: RWY 15/33 ELS ONLY. RWY 18L NOT USABLE
NOR – NORTHRUP: RWY 17 GREEN. RWY23 STILL RED - WET.
YHZ – HALIFAX: RWY 14/32 CLOSED DAILY 1130Z-2100Z 13 AUG TO 17 AUG.
RWY 23 THDL DISPLACED 1,200’ 1130Z-2100Z 13 AUG TO 17 AUG.
MRN – MORON: CLOSED TO DOD OPERATIONS 1900Z TO 0259Z DAILY
NKT – CHERRY POINT: RWY 14R/32L CLOSED 13 AUG TO 16 SEP.
NTU – OCEANA: RWY14L/32R CLSD 14 AUG 1959Z - 15 AUG 2000Z
HNL – HONOLULU: OPERATING, BUT CAUTION FOR POSSIBLE TROPICAL CYCLONE
WINDS TIL 16 AUG 2359Z
WAK – WAKE ISLAND: CLOSED DUE TO RECONSTRUCTION.
YYR – GOOSE BAY: RWY 08/26 CLOSED. 16/34 AVAILABLE.
ZZA – ZARAGOZA: INSTALLING MOBILE NATO BARRIER.
IKF – KEFLAVIK: NO AGREEMENT FOR USE.
AWG – RIO GALLEGOS: NO AGREEMENT FOR USE.

NEXT 2 PLS OPPORTUNITIES:

EDW22 ORB 110 – 6/22:26 (SCT150 BKN220 240/14P22)
EDW22 ORB 126 – 7/22:49 (SCT150 BKN220 250/15P24)

OMS TANK FAIL CAPABILITY:

L OMS FAIL: NO
R OMS FAIL: NO

LEAKING OMS PRPLT BURN:

L OMS LEAK: ALWAYS BURN RETROGRADE
R OMS LEAK: ALWAYS BURN RETROGRADE

OMS QUANTITIES(%)

L OMS	OX = 45.9	R OMS OX = 44.9	
	FU = 46.0	FU = 44.9	

SUBTRACT I'CNCT COUNTER FOR CURRENT OMS QUANTITIES

DELTA V AVAILABLE:

OMS	376 FPS
ARCS (TOTAL ABOVE QTY1)	39 FPS
TOTAL IN THE AFT	415 FPS
ARCS (TOTAL ABOVE QTY2)	69 FPS
FRCS (ABOVE QTY 1)	32 FPS
AFT QTY 1	83 %
AFT QTY 2	45 %

THERE ARE NO FAILURE/IMPACT/WORK AROUNDS FOR TODAY.

Good morning Barb, Al & Dave,

What a call down! Thanks very much for the thorough tagup. Just a few questions below. You completed approximately 30% more than we expected yesterday. You are now approximately 51% complete with SH transfers and 69% complete with MDDK transfers. Per your request, we've sent up SH Transfer List pages that contain both complete and incomplete items. We've also added a new CTB (item 802) for return in SH which will contain a leaky PWR and a placebo kit Clay requested to return.

For STS, the Transfer List Excel file, FD08_TransferList_STS118.xls, is located on the KFX machine in **C:\OCA-up\transfer**.

For ISS, the Transfer List Excel file, FD08_TransferList_STS118.xls, is located in **K:\OCA-up\transfer**.

Q&As:

Q1: Item 43 (new multimeter): You called this item as complete. We've discovered a mistake in the 'Stowage at Undock' location on this item. The Transfer List told you to stow this item in s/n 1201 0.5 CTB at NOD1P4_A1. Per IMS s/n 1201 0.5 CTB is at LAB1D3 and is actually Return Bag 423. The only 0.5 CTB in NOD1P4_A1 is s/n 1172. **The new multimeter should have been stowed inside 0.5 CTB s/n 1202 at NOD1O4_D1.** If the multimeter was not stowed inside s/n 1202 at NOD1O4_D1, please relocate it to this CTB. Sorry for this oversight.

Q2 : Packing MDDK 5MLE bags: Could you give us some indication of when you expect to pack up 5MLE bags in the MDDK so we could add them on the correct day to your choreography? Thanks.

A1: LiOH Swap Activities: In hopes of simplifying stowing LiOH cans in the ISS Stockpile at NOD1S4_D2, we've provided a photograph of LiOH stowed in this location; please configure cans as they are shown in this photo – you may need to stow one can like the one designated with the green circle in the photo:

A2: Item 632 (Double Coldbag): We did some research and are hopeful this can be found inside LAB1S4_D1. Please check this location and let us know.

For today – FD08 Choreography

Middeck

- Items 701 (Fyodor): Stow БОК-3 items packed per FD7 timelined activity БОК-3 STOW in Bag G

Middeck/Spacehab:

- Items 749, 181, 750, 751, 178, 752, 718: Complete LiOH swap items
- Item 700 (Fyodor): Transfer returning AMP to MDDK after AMP RESUPPLY

Spacehab

- Item 434.30 (Fyodor/Oleg): Pack HRM Chest Straps for return
- Reinstall PF rack front trays (60 min)
- Item 632, 633: Finish packing up 5MLE **launched at AP01** with coldbags; strap at **AS01**
- Continue packing return items in SF Rack
- Items 732, 733, 734 (Tracy/Barb): Configure MISSEs for return; temp stow in SH or in node

Please update the Middeck Transfer List as follows:

In **LAYOUTS** tab:
Replace Page ML-2

In **MDDK RSPLY REALTIME ADDITIONS** tab:
Replace Page Resupply 9

In **RETURN** tab:
Make Pen and Ink changes to Return Page 4:
Item 701: Change “FD9” to “FD7” in both the “Initial Stowage” and the “PROCEDURES/**constraints**/**comments” columns.

Please update the Spacehab Transfer List as follows:

In **RESUPPLY** tab:
Replace the following pages:
Resupply Page 10
Resupply Page 15 through Resupply Page 18
Resupply Page 24
Resupply Page 25

In **SWAP** tab:
Replace the following pages:
Swap Page 7 through Swap Page 10

In **RETURN** tab:
Replace the following pages:
Return Page 11
Return Page 15 through Return Page 18
Return Page 23

In **SPACEHAB RTN REALTIME ADDITIONS** tab:
Replace Return Page 26

For tomorrow - FD09 Choreography

Middeck
- Continue MDDK return transfers

Spacehab
- Continue packing return items in SF Rack
- Items 745: Stow old transponder (in 1.0 CTB/foam from new transponder) on PF rack front or temp stow in node
- Items 165-167, 753 (AI): Empty STS food CTBs into MDDK locker(s); stow empty 0.5 CTBs in SH for return.

Please call us if you have questions.
- The Transfer Team

Good morning Barb, Al & Dave,

What a call down! Thanks very much for the thorough tagup. Just a few questions below. You completed approximately 30% more than we expected yesterday. You are now approximately 51% complete with SH transfers and 69% complete with MDDK transfers. Per your request, we've sent up SH Transfer List pages that contain both complete and incomplete items. We've also added a new CTB (item 802) for return in SH which will contain a leaky PWR and a placebo kit Clay requested to return.

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A1: LiOH Swap Activities: In hopes of simplifying stowing LiOH cans in the ISS Stockpile at NOD1S4_D2, we've provided a photograph of LiOH stowed in this location; please configure cans as they are shown in this photo – you may need to stow one can like the one designated with the green circle in the photo:

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For today – FD08 Choreography

Middeck

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Middeck/Spacehab:

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Spacehab

- Item 434.30 (Fyodor/Oleg): Pack HRM Chest Straps for return
- Reinstall PF rack front trays (60 min)
- Item 632, 633: Finish packing up 5MLE **launched at AP01** with coldbags; strap at **AS01**
- Continue packing return items in SF Rack
- Items 732, 733, 734 (Tracy/Barb): Configure MISSEs for return; temp stow in SH or in node

Please update the Middeck Transfer List as follows:

In **LAYOUTS** tab:
Replace Page ML-2

In **MDDK RSPLY REALTIME ADDITIONS** tab:
Replace Page Resupply 9

In **RETURN** tab:
Make Pen and Ink changes to Return Page 4:
Item 701: Change “FD9” to “FD7” in both the “Initial Stowage” and the “PROCEDURES/**constraints**/**comments” columns.

Please update the Spacehab Transfer List as follows:

In **RESUPPLY** tab:
Replace the following pages:
Resupply Page 10
Resupply Page 15 through Resupply Page 18
Resupply Page 24
Resupply Page 25

In **SWAP** tab:
Replace the following pages:
Swap Page 7 through Swap Page 10

In **RETURN** tab:
Replace the following pages:
Return Page 11
Return Page 15 through Return Page 18
Return Page 23

In **SPACEHAB RTN REALTIME ADDITIONS** tab:
Replace Return Page 26

For tomorrow - FD09 Choreography
Middeck
- Continue MDDK return transfers

Spacehab
- Continue packing return items in SF Rack
- Items 745: Stow old transponder (in 1.0 CTB/foam from new transponder) on PF rack front or temp stow in node
- Items 165-167, 753 (AI): Empty STS food CTBs into MDDK locker(s); stow empty 0.5 CTBs in SH for return.

Please call us if you have questions.
- The Transfer Team

MSG 69A (15-0939A) - FD08 Transfer Message

RETURN MODULAR LOCKER LAYOUT

LW MAR 8929-TBD

CDR	Scott J. Kelly
PLT	Charles Hobaugh
M/S #1	Tracy E. Caldwell
M/S #2	Rick Mastracchio
M/S #3	David Williams
M/S #4	Barbara Morgan
M/S #5	Al Drew

LEADER:	VANESSA LOWE
DATE:	8-14-07
LAUNCH:	8-8-07
FLIGHT:	STS-118/13A.1/SHAB
VEHICLE:	OV-105
CREW:	7 PERSON 11+3+2 DAYS
RQMTS:	SRMS, ERGOMETER, SORG, NO RCRS, SLEEPING BAGS

PANTRY FOOD 1622 -308 | MF57A PANTRY FOOD 1622 -308 | PANTRY FOOD 1622 -305

ML60B 6013 -308

ML60E TBD -TBD

ML60J 6066 -322

ML60M 6014 -311

VOL B — NOT INSTALLED

VOL 3B (MA73J)

MUP J12 — MUP J13 — MUP J22

MIDDECK FORWARD

MF14E TBD	MF28E	MF43E 7465 -301 CBTM #1
MF57E CBTM #2	MF71E 7463 -301 MERLIN	
MF14G	MF28G 6300 -337 SHUTTLE MULTIMETER	MF43G
MF57G	MF71G	
MF14H	MF28H 9900 -301 POST INSERTION#2 ALTIMETER	MF43H
MF57H	MF71H 7464 -301 CCM-A	
MF14K	MF28K 9900 -301 POST INSERTION #1	MF43K CBTM #3
MF57K BAG #401 HCTB / BAG #423	MF71K TBD	
MF14M	MF28M 0290 -301 DOUBLE (HRP) COLDBAG	MF43M
MF57M	MF71M	
MF14O	MF28O	MF71O 0847 -304 DC VACUUM 304 -328

MCIU — PDI

MIDDECK AFT

MA9D TBD DOUBLE (SPEGIS/HRP) COLDBAG	MA16D TBD	
MA9F 1908 -309 CREW SUPPORT	MA16F TBD	
MA9G	MA16G TBD	
MA9J TBD CD CARRYING CASE PMDIS CD (2) CEVIS CARDS (4)	MA16J TBD	
MA9L 0244 -301	MA16L	
MA9N SOFT STWG BAGS 7432 -311 PHK'S (7) 4980-310 BRKTS(3)/CCK LT STICKS 8071-308 RSTRNTS/ FIBERSCOPE RE-ENTRY 8070-302	MA16N 8737 TBD	

E
MD CEIL (PORT 1) 0255 -303
SPARE DTV HDW
TPS HDW
RCC TOOLS

F
MD CEIL (PORT 2) 0263 -302

G
MD CEIL (STBD 1) 0073 -305
MESH BAG(Wm)
MESH BAG(Ad)
FOAM/TAPE

B
MD CEIL (STBD 2) 0274 -303

H
MD FLOOR (PORT 2) 0478 -306
EVA TETHERS(6)

A
MD FLOOR (PORT 1) 0264 -306
CTB HLF #428-GSC/PLIERS 9111-308
CTB HLF #433-KIT ASSY/CSA-CP/IMAK 0292-301
CTB #424-SWAB RTRN/CD- R/READER ASSY 0295-301
CTB HLF #438 CSA-02 MON/CDMK/IMAK/CSA-CP/SMPL 0293
AMP

D
MD FLOOR (STBD 2) 0245 -303
FRED
HYGIENEV
HYGIENE (CTB)
SPACEHAB DUCT
FRED LEG BAR

C
MD FLOOR (STBD 1) 0265 -304
SLEEPING BAG LINERS (7)
NADA CHAIRS (6)
MESH BAG (MT)
COMMAND UNIT

A16	A17	VOL D (MD52C)	VOLUME F TBD (MD76M)	VOLUME G TBD (MD80R)	VOLUME H (MD23R)	WMC (MA82H)	EXT AIRLOCK TBD (STBD) 2-EMUs (PORT) TBD EXT A/L FLOOR TORQUE WRENCH DIDB'S (16) 0261-302

29 LIOH + 1 ATCO STOWED IN LIOH BOX
3 INSTLD
18 LIOH STOWED IN SPACEHAB

C/D JSC (XXXX-TBD)
P/D JSC (XXXX-TBD)
C/D KSC (XXXX-TBD)
P/D KSC (XXXX-TBD)
ISS LABEL (XXXX)
CEIT KIT SJD33112098-308

WINDOW SHADE BAG - (5548-342)
WINDOW SHADES
IFM CABLES & HOSES (4259-331)
CAMERA SHROUDS
FILM CHG BAG

L10A1: AVIU(6686-328)
L10A2: DTV MUX
L10A3: DTV/ VTR/VIP
L11A1: PDIP 2
L11:A2/A3: OIU 1/2
L12A1: SSP 1
L12A2: SSP 2
L12A3: PDIP
R12A1: VPU
R12A2: OPP

	CTB	HLF	SGL
LAUNCH	TBD	TBD	
RETURN	TBD	TBD	

* NOT APPROVED
o L-24 LATE LOAD
SWAP
⊗ TRANSFER HARDWARE
CTB CARGO TRANSFER BAG
HCTB HALF CARGO TRANSFER BAG

DWG NO. SGD32104441

CCMM: TRACY HUNT
(281) 483-3063

/USR/DWGS/LOCKER/STS118

NOTE: LOCKER LAYOUTS ARE FOR REFERENCE ONLY & ARE NOT RELEASED DWGS. FOR RELEASED DRAWING, PLEASE REFER TO THE CREW COMPARTMENT CONFIGURATION DRAWING FOR THIS FLIGHT (SGD32104441)

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
			Mddk Resupply Realtime Additions								
	3	☑		800	Connector Pliers [p/n SKG33117562-930]	2 pair	MF71O		NOD1D4_G2 ISS IVA Tool Box (Drawer 4)	1.36	**These pliers will be stowed in slots vacated by returning pliers (ref item 720).

[ ] - indicates note added by Transfer Team (not seen on actual label)

STS-118/13A.1
Resupply

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
			Spacehab Resupply								
			Aft Bulkhead								
	4	☑		100	ICEPAC BELT -32°C - 18	1.0 CTB	AC01		LAB1O6 rack front	51.6	
				101	SPACEHAB PGSC [s/n 1115]	1	AC02 (Subsystem Stow 1)	SH Deployed	NOD1S4_C2	6.59	**Remove “SPACEHAB” label on laptop prior to transfer to ISS. Deactivate per SUBSYSTEM PGSC DEACTIVATION, (SH OPS, ON-ORBIT). **Transfer of the Laptop includes its internal components but none of the peripherals (i.e. 1553 PCMCIA Card, Network Card, bricks, or cables).
	4	☑		102	Elite-S2 Cam 2 Elite-S2 Cam 3 Elite-S2 Cam 4	1.0 CTB	AC03	LAB	LAB1O1_G2	30.7	
	5	☑		103	NODE2 VEST OUTFIT/ ALIGN GUIDES/LHAs	3.0 CTB	AC04		NOD1O1	55.5	
X	7	☑		104	PWR	1	AC05 (in 1.0 CTB)		NOD1P2	29.4	**This PWR contains ITCS fluid; it will not be used for docked ops. **Remove PWR from CTB and stow PWR on ISS. CTB/foam will return at PF14 ~~PF13~~ (ref item 742). CTB/foam temp stow: AC05 **Remove yellow CTB label and discard, expose green return label. Write "Return Bag 742" on green label.
	4	☑		105	SAME HARDWARE 2	3.0 CTB	AC06		LAB1D2 rack front	72.4	

[ ] - indicates note added by Transfer Team (not seen on actual label)

STS-118/13A.1
Resupply

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
	5	☑		127	BANISTERS-2	1 ASSY	AS03 (in 5MLE)		FGB_105	15.44	**Remove two foam cutouts from larger foam and place between ends of banisters to secure them together for transfer. The foam holding banisters will be moved to IELK 5MLE at AP04 for return.
	5	☑		128	(OSE) BOOM STAND 2	1	AS03 (in 5MLE)	NODE		71.5	**PENETRATOR - once removed from bag, transfer immediately to ISS.** **Release 2 velcro straps holding this item in 5MLE and transfer. **Configured on FD07 per timelined activity OBSS OSE EVA4 PREP.
	5	☑		129	(PAD) BOOM ATTACH DEVICE 2	1	AS03 (in 5MLE)	NODE		16	**Release velcro strap holding this item in 5MLE and transfer. **Place small piece of foam in pad back in bag prior to transfer of pad. **Configured on FD07 per timelined activity OBSS OSE EVA4 PREP.
				130	CRACK REPAIR	3.0 CTB	AS08	SH Deployed (if reqd)		78.38	**Do not transfer; this CTB returns in SH at SF13.** **STS contingency use only

[ ] - indicates note added by Transfer Team (not seen on actual label)

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
			Fwd Bulkhead								
X				131	MISC. HARDWARE	0.5 CTB	FC05	FC05 ~~SH Deployed (if reqd)~~		7	**Do not transfer; this CTB is up/down in SH and returns inside return item 418.** **A ziplock of RETs will be removed from this CTB on FD2 per EVA TOOL PREP FOR TRANSFER TO ISS; 2 more ziplocks will be removed from this CTB per items 131.1 & 131.2. The remaining ziplocks (template mounting assys and mounting strip assys) will remain in this CTB for return. **Remove yellow CTB label and discard, expose green return label. Write "Return bag 418.15" on green label.
	7	☑		131.1	IWIS Accelerometer Cable Assy	1 ziplock	FC05 (in 0.5 CTB)		LAB1P5_A1 (in 0.5 CTB s/n 1188)	3.5	
	7	☑		131.2	VACUUM CLEANER POWER CABLE	1 ziplock	FC05 (in 0.5 CTB)		NOD1O4_A2 (in 1.0 CTB s/n 1253)	0.75	
	0	☑		132	EPO	1.0 CTB	FC07		FC07	39.3	**Do not transfer; this CTB is up/down in SH at this location (ref item 729).** **This CTB will return with bags of seeds only.
				132.1	[EPO KIT C] EPO GROWTH CHAMBER-2 EPO SUPPLY WATER BAG-4 EPO WATERING SYRINGE-1 EPO WASTE WATER BAG-1	1 ziplock	FC07 (in 1.0 CTB)	MDDK	LAB1O2 _D1 rack front	2.04	**Remove EPO Kit C from CTB and use for EPO Ops. Then transfer to ISS. **Retrieve 24X24 ziplock bag from Subsystem Stow 5 at AC11 for containing EPO KIT C and filled water supply bags.
				132.2	SEED BAG	1 ziplock	FC07 (in 1.0 CTB)	ISS	FC07 (in 1.0 CTB)	0.1	**Remove one SEED bag from from EPO CTB and use for EPO Ops. Then return to CTB (will rtn in SH).

STS-118/13A.1
Resupply

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
X				133	SAMPLE/PURGE KIT-1 24x24" ZIPLOCK BAG-2 CWC-1 [Silver Biocide Syringe Kit]	0.5 CTB	FC11	SH		8.4	**Temp stow on MDDK on FD2 (sample/purge kit reqd on FD2 ; CWC reqd on FD6). **Empty 24X24 ziplock bags are for containing emptied ISS CWCs. Stage in Subsystem Stow 5 at AC11 with other 24X24 ziplock bags. **Empty CTB will be added to 3.0 CTB (ref item 726) at AC17. ~~5MLE at AS01 (ref item 744).~~ **Sample/Purge Kit will return in SH (ref item 754.1).
	7	☑		133.1	Silver Biocide Syringe Kit [s/n 1005]	1 kit	FP10	SH (in 0.5 CTB)	NOD1D2 (in M-02 bag, s/n 1026)		**Kit was placed in the FC11 CTB on FD2. Remove and transfer kit to ISS.
	0	☑		134	LATE INSPECTION HARDWARE	0.5 CTB	FC12		FC12	20.1	**Do not transfer; this CTB is up/down in SH at this location (ref item 731).** **STS contingency use only
				135	LiOH BAG 13 58	0.5 CTB	FC13		FGB_206 panel front	10.8	**10A preposition.
	0	☑		136	PLT SPACEHAB CLOTHING	0.5 CTB	FP01		FP01	14.4	**Do not transfer; this CTB is up/down in SH at this location (ref item 740).** **STS clothes for end of mission days.
	0	☑		137	MS1 SPACEHAB CLOTHING	0.5 CTB	FP02		FP02	7.1	**Do not transfer; this CTB is up/down in SH at this location (ref item 735).** **STS clothes for end of mission days.
	0	☑		138	CDR SPACEHAB CLOTHING	0.5 CTB	FP03		FP03	6	**Do not transfer; this CTB is up/down in SH at this location (ref item 725).** **STS clothes for end of mission days.

[ ] - indicates note added by Transfer Team (not seen on actual label)

STS-118/13A.1
Resupply

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
	0	☑		139	MS2 SPACEHAB CLOTHING	0.5 CTB	FP04		FP04	9.4	**Do not transfer; this CTB is up/down in SH at this location (ref item 736).** **STS clothes for end of mission days.
	0	☑		140	MS3 SPACEHAB CLOTHING	0.5 CTB	FP05		FP05	9	**Do not transfer; this CTB is up/down in SH at this location (ref item 737).** **STS clothes for end of mission days.
	0	☑		141	MS4 SPACEHAB CLOTHING	0.5 CTB	FP06		FP06	7.1	**Do not transfer; this CTB is up/down in SH at this location (ref item 738).** **STS clothes for end of mission days.
X	7	☑		142	PFE BAG 1	1.0 CTB	FP07		LAB1D5 ~~LAB1P5 under RWS~~	21	
X	7	☑		143	PFE BAG 2	1.0 CTB	FP08		LAB1D5 ~~LAB1P5 under RWS~~	15.54	
				144	Food Rations Container Barcode Label Kit Dewar Quarter Foam Plug Minimag Spare Bulb Kit ~~Silver Biocide Syringe Kit~~	1.0 CTB	FP10		LAB1O6 rack front	16.6	**4 silver biocide syringes will be removed from the Silver Biocide Kit in this CTB on FD2. The syringes will be temp stowed in the MDDK water locker for CWC fills.
	4	☑		144.1	SILVER BIOCIDE SYRINGES	4	FP10 in 1.0 CTB (in SILVER BIOCIDE KIT)	MF28M		5.36	**Remove 4 syringes from kit and stow them in water locker in MDDK. Kit was restowed on FD2 in FC11 (ref item 133.1)..

[ ] - indicates note added by Transfer Team (not seen on actual label)

STS-118/13A.1
Resupply

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
	6	☑		170	FOOD CONTAINERS	2 SETS OF 2	SF05		FGB_313	52.2	**Do not handle by the green strap.**
	6	☑		171	LiOH BAG 8 47	0.5 CTB	SF06a		FGB_217 panel front	10.8	**Bag has white label, but is really a straight transfer bag.
	7	☑	See Swap Tab - LiOH	172	LiOH BAG 3 38, 39, 40 [STS-118]	1.0 CTB	SF06b	See Swap Tab - LiOH		27.4	
X				173	SHUTTLE MD HYGIENE	1.0 CTB	SF07a	SF07a ~~SH Deployed (if reqd)~~		28	**Do not transfer; this CTB returns in SH at** SF17 **(ref item 748).** **This CTB contains extra STS hygiene supplies.
	7	☑		174	ISS PHOTO/TV RESUPPLY KIT	0.5 CTB	SF07c		LAB1D3	24	
	7	☑		175	LiOH BAG 5 44	0.5 CTB	SF08a		FGB_219 panel front	10.96	**Bag has white label, but is really a straight transfer bag.
	6	☑	See Swap Tab - IEU	176	ISS EMU UMBILICAL [new]	1.0 CTB	SF08b	See Swap Tab - IEU		32.7	

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STS-118/13A.1
Resupply

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
	7	☑		177	LiOH BAG 6 45	0.5 CTB	SF09a		FGB_224 panel front	10.8	**Bag has white label, but is really a straight transfer bag.
			See Swap Tab - LiOH	178	LiOH BAG 4 41, 42, 43 [STS-118]	1.0 CTB	SF09b	See Swap Tab - LiOH		27.3	
	7	☑		179	LiOH BAG 9 48	0.5 CTB	SF10a		FGB_224 panel front	10.9	**Bag has white label, but is really a straight transfer bag.
	7	☑		180	ISL MOD KIT (NODE 2)	1.0 CTB	SF10b		FGB_226 panel front	30.7	
			See Swap Tab - LiOH	181	LiOH BAG 2 35, 36, 37 [STS-118]	1.0 CTB	SF11	See Swap Tab - LiOH		27.4	
	7	☑	See Swap Tab - LiOH	182	LiOH BAG 1 32, 33, 34 [STS-118]	1.0 CTB	SF12	See Swap Tab - LiOH		27.4	

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STS-118/13A.1
Swap

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
			Spacehab Swaps								
			IEU								
	6	☑		19	ZIPLOCK FOR RETURNING IEU	1 ziplock	MD CEIL STBD 2 (Bag B)	AC11 (in Subsystem Stow 5)		0.12	**This empty ziplock is for the returning IEU (ref item 417). Temp stow in SH in Subsystem Stow 5 at AC11 with other ziplock bags.
	6	☑		176	ISS EMU UMBILICAL [new]	1.0 CTB	SF08b	A/L1D2 (behind closeout)		32.7	**A 24X30 ziplock is stowed next to this CTB in the double stowage rack. It is labeled 'SCU Umbilical' **Do not use this ziplock for returning IEU.** Leave this ziplock in SF08 for return. **Remove foam blocks from IEU QDs. Stow CTB on ISS. The foam blocks will be used for returning the old IEU (ref item 417).
X				417	13A.1 Return Bag 417 [ISS EMU Umbilical s/n 1001] [Old]	1.0 CTB	NOD1D2	AC15	AC03		**Old IEU contains ~5 lbs of water. **Place foam blocks from new IEU (ref item 176) over old IEU QDs. Place old IEU in ziplock from the MDDK labeled 'ziplock for returning IEU' (ref item 19), then restow in CTB.

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STS-118/13A.1
Swap

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
			ISIS								
	5	☑		186.2	Elite-S2 IMU	1 ISIS Drawer	SF18 (in 3.0 CTB)		LAB1S4_L2	71.04	**WARNING: ELITE-S2 has a RF Bonding Block on the back of the drawer which has a sharp edge.** **Remove kapton tape from rear blind-mate connectors before installing in EXPRESS rack.** **Reference procedure ISIS DRAWER REMOVAL INSTALLATION in PROCEDURE tab. **Swap with returning ISIS dwr (ref item 420). **Temp stow all 4 pieces of foam from this dwr to be used for returning ISIS dwr. **Foam temp stowed:_____.
X				726	CEVIS/4PU ISIS Dwr	3.0 CTB		SH deck ~~NOD1D2~~	AC17	54.37	**3.0 CTB s/n 1060 was pregathered, labeled and staged by ISS crew at NOD1O1. **ISIS Stowage Drawer (ref item 420) and old CEVIS ergometer/cable (ref item 726.1 & 726.2) will be added to this CTB for return.
	6	☑		420	13A.1 Return Item 420 [ISIS Stowage Drawer]	1 ISIS Drawer	LAB1S4_L2	Temp stowed in item 186 at LAB1D1 rack front	AC17 (in 3.0 CTB)	71.04	**Reference procedure ISIS DRAWER REMOVAL INSTALLATION in PROCEDURE tab. **Use 4 pieces of foam from ascent ISIS dwr (ref item 186.2) and ref 3.0 CTB dwg in LAYOUTS tab to pack this dwr for return.
				726.1	CEVIS Ergometer Assy [old] [s/n 1002]	1	LAB1P3 (installed on CEVIS)		AC17 (in 3.0 CTB)	59	**Removed on FD10 per timelined activity CEVIS R&R. **Pack item in 3.0 CTB per dwg in LAYOUTS tab.
				726.2	ERGOMETER DISPLAY CABLE ASSY [old] [s/n 1002]	1	LAB1P3 (installed on CEVIS)		AC17 (in 3.0 CTB)	1.50	**Removed on FD10 per timelined activity CEVIS R&R. **Pack item in 3.0 CTB per dwg in LAYOUTS tab.
				744	Return Bag 744 ~~SAMPLE/PURGE KIT-1~~ ~~24x24" ZIPLOCK BAG-2~~ ~~CWC-1~~ [empty 0.5 CTB]	0.5 CTB	FC11	MDDK	AC17 (in 3.0 CTB)	2.76	**This CTB launched at FC11 (ref item 133) and was emptied during docked ops.

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STS-118/13A.1
Swap

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
			LiOH								
	7	☑		182	LiOH BAG 1 32, 33, 34 [STS-118]	1.0 CTB	SF12	ISS		27.4	**Transfer to ISS for FD08 timelined LiOH EXCHANGE activity.** **Remove 3 cans from CTB and swap with 3 STS-117 cans from ISS LiOH stockpile NOD1S4_D2 (ref item 749). **Before closing NOD1S4_D2, ensure all can handles are collapsed and cans are not compressed. **Remove yellow label and discard to expose green return label. Write STS-117 LiOH #1-3 on green label.
X				749	STS-117 LiOH #1-3 [used cans]	1.0 CTB		SH ~~NOD1S4_D2~~	AC15	31	**Retrieve 3 STS-117 cans from mesh bag labeled "STS-117 Used Cans for Return" from ISS LiOH stockpile and place in empty CTB (ref item 182).
				181	LiOH BAG 2 35, 36, 37 [STS-118]	1.0 CTB	SF11	ISS		27.4	**Transfer to ISS for FD08 timelined LiOH EXCHANGE activity.** **Remove 3 cans from CTB and add cans to ISS LiOH stockpile at NOD1S4_D2. This CTB will be used to return 3 STS-118 used cans in SH (ref item 750). **Before closing NOD1S4_D2, ensure all can handles are collapsed and cans are not compressed. **Remove yellow label and discard to expose green return label. Write STS-118 LiOH #1-3 on green label.
X				750	STS-118 LiOH #1-3 [used cans]	1.0 CTB		SH ~~MDDK~~	PF25	31	**Place 3 used STS-118 cans from MDDK LiOH box in empty CTB (ref item 181).

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STS-118/13A.1
Swap

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
	7	☑		172	LiOH BAG 3 38, 39, 40 [STS-118]	1.0 CTB	SF06b	ISS		27.4	**Transfer to ISS for FD08 timelined LiOH EXCHANGE activity.** **Remove 3 cans from CTB and add cans to ISS LiOH stockpile at NOD1S4_D2. This CTB will be used to return 3 STS-118 used cans in SH (ref item 751). **Before closing NOD1S4_D2, ensure all can handles are collapsed and cans are not compressed. **Remove yellow label and discard to expose green return label. Write STS-118 LiOH #4-6 on green label.
X				751	STS-118 LiOH #4-6 [used cans]	1.0 CTB		SH ~~ISS~~	PF17	31	**Place 3 used STS-118 cans from MDDK LiOH box in empty CTB (ref item 172).
				178	LiOH BAG 4 41, 42, 43 [STS-118]	1.0 CTB	SF09b	ISS		27.3	**Transfer to ISS for FD08 timelined LiOH EXCHANGE activity.** **Remove 3 cans from CTB and add cans to ISS LiOH stockpile at NOD1S4_D2. This CTB will be used to return 3 STS-118 used cans in SH (ref item 752). **Before closing NOD1S4_D2, ensure all can handles are collapsed and cans are not compressed. **Remove yellow label and discard to expose green return label. Write STS-118 LiOH #7-9 on green label.
				752	STS-118 LiOH #7-9 [used cans]	1.0 CTB		ISS	PF18	31	**Place 3 used STS-118 cans from MDDK LiOH box in empty CTB (ref item 178).
				718	unused LiOH cans from STS-114 [STS-114 unused cans - 9]	1 Mesh Bag		NOD1S4_D2	MDDK LiOH box	63	**Remove 9 cans from bag and place in MDDK LiOH box in slots emptied when packing items 750-752.

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STS-118/13A.1
Return

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
	7	☑	See Swap Tab - Wrenches	431	13A.1 Return Bag 431 [IVA TOOLS]	0.5 CTB	NOD1D2	Temp stowed in SH	See Swap Tab - Wrenches	20.90	
	3	☑	See Swap Tab - Wrenches	431.3	Scopemeter Pressure Probe (b/c 00009692J)	1	NOD1O4_D1 (0.5 CTB s/n 1202)		See Swap Tab - Wrenches		
	4	☑	See Swap Tab - Wrenches	431.4	Scopemeter Temperature Probe Kit (p/n SEG39130249-301, s/n 1002)	1	NOD1O4_D1 (0.5 CTB s/n 1202)		See Swap Tab - Wrenches		
	3	☑	See Swap Tab - Wrenches	431.5	Scopemeter Current Probe (s/n 1002)	1	NOD1O4_D1 (0.5 CTB s/n 1202)		See Swap Tab - Wrenches		
	3	☑	See Swap Tab - Wrenches	431.6	Scopemeter (b/c 00015680J)	1	NOD1O4_D1 (0.5 CTB s/n 1202)		See Swap Tab - Wrenches		
	4	☑	See Swap Tab - Wrenches	431.11	Wrenches [old]	5	NOD1D4_G2 ISS IVA Tool Box (Drawers 2 & 3)		See Swap Tab - Wrenches	8.97	
	4	☑	See Swap Tab - Wrenches	431.12	Scopemeter Temperature Probe Kit (p/n SEG39130249-301, s/n 1004)	1	NOD1O4_D1 (0.5 CTB s/n 1202)		SF11a (in 0.5 CTB)		**Verify with Clay this item was packed in Return Bag 431 per OCA message 15-0900A, and contains probe with barcode number 00050125J.
				432	13A.1 Return Bag 432 [CFE Bag 1]	0.5 CTB	NOD1D2		SF02b	13.70	
				434	13A.1 Return Bag 434 [CHeCS CMS]	1.0 CTB	NOD1D2		PF15	31.45	**This bag already contains several prepacked CHeCS items. **Do not transfer until Items 434.30-434.31 have been added to this CTB after ISS Crew exercise ops on FD7.
				434.30	HRM Chest Straps [old] [s/n 4018 and 4019]	2	In use by ISS CDR & FE-1		PF15 (in 1.0 CTB)		**Packed in 1.0 CTB by ISS Crew after exercise ops on FD7.
	5	☑		434.31	TVIS Skirt [old]	1	SM (Installed on TVIS)		PF15 (in 1.0 CTB)		**Removed from TVIS and packed by ISS Crew on FD5 per timelined activity TVIS SKIRT R&R.

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STS-118/13A.1
Return

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
				626	13A.1 Return Item 626 [US Food Container Bundle]	1 Bundle	NOD1S4_D1		SF03	9.00	
	6	☑		627	13A.1 Return Item 627 [УСИЛ (IELK)]	1	DC1		AP04 (in 5MLE)	104.10	**Rearrange ascent foam in 5MLE (ref dwg in LAYOUTS tab) and pack IELK in 5MLE bag. **Add 2 large foam pcs with cutouts for banisters from AS01 and AS03 5MLE bags.
	6	☑		628	13A.1 Return Item 628 [Моноблок CA325]	1 RS White Bag	FGB Floor		AP01 (in 5MLE)	38.58	**This 5MLE bag launched at AS01. **Pack item in 5MLE bag per dwg in LAYOUTS tab.
	6	☑		629	13A.1 Return Item 629 [Рефлотрон-4 (Reflotron-4 Analyzer)]	1 RS White Bag	FGB Floor		AP01 (in 5MLE)	38.58	**This 5MLE bag launched at AS01. **Pack item in 5MLE bag per dwg in LAYOUTS tab.
	6	☑		630	RETURN ITEM 630 [SUNSHADE ASSEMBLY]	1	NOD1D2		AS03 (in 5MLE)	33.84	**Pack item in 5MLE bag per dwg in LAYOUTS tab.
				631	13A.1 Return Item 631 [US Food Container Bundle]	1 Bundle	NOD1S4_D1		SF03	9.00	
X				632	13A.1 Return Item 632 [Double Coldbag s/n 1008]	1	LAB1S4_D1 ~~NOD1P2~~		AS01 (in 5MLE)	36.16	**This 5MLE bag launched at AP01. **Pack in 5MLE bag per dwg in LAYOUTS tab and photo in REF tab. ~~**Item 107 transfers to this initial location.~~
X				633	13A.1 Return Item 633 [Double Coldbag s/n 1011]	1	NOD1P2	SH deck	AS01 (in 5MLE)	36.16	**This 5MLE bag launched at AP01. **Pack in 5MLE bag per dwg in LAYOUTS tab and photo in REF tab. **Item 147 transfers to this initial location.

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STS-118/13A.1
Return

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
				634	13A.1 Return Bag 634 [Anderson Crew Preference 1]	0.5 CTB	NOD1D2		FS12	11.00	
				635	N/A						
	6	☑		636	13A.1 Return Item 636 [CBM Center Disk Cover]	1	NOD1D2		AS03 (in 5MLE)	33.84	**Pack in 5MLE bag per dwg in LAYOUTS tab.
	6	☑		637	13A.1 Return Item 637 [EMCH]	1	LAB1O2_D2		AP01 (in 5MLE)	61.00	**This 5MLE bag launched at AS01. **Pack item in 5MLE bag per dwg in LAYOUTS tab.
	6	☑		638	13A.1 Return Item 638 [HRF FGI FLIGHT CALIBRATION UNIT]	1	LAB1P2_G2		AP01 (in 5MLE)	38.58	**This 5MLE bag launched at AS01. **Pack item in 5MLE bag per dwg in LAYOUTS tab. **Item 112.1 transfers to this initial location.
	7	☑		639	Return Item 639 EMCS CENTRIFUGE CONTAINER B	1	NOD1D2		PF04	17.92	**Ref photo in REF tab showing packing config in MESS rack.
	7	☑		640	Return Item 640 EMCS CENTRIFUGE CONTAINER A	1	NOD1D2		PF04	17.97	**Ref photo in REF tab showing packing config in MESS rack.

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STS-118/13A.1
Return

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
			Non-Prepacked Bags/Items								
				725	CDR SPACEHAB CLOTHING	0.5 CTB	FP03		FP03	13.00	**Do not transfer; this CTB is up/down in SH in this location (ref item 138).** **STS clothes for end of mission days. **Stow any worn clothes in this bag if any clothing was removed during the flight.
X			See Swap Tab - ISIS	726	CEVIS/4PU ISIS Dwr	3.0 CTB	NOD1D2	SH deck	See Swap Tab - ISIS	54.37	
	6	☑	See Swap Tab - ISIS	420	13A.1 Return Item 420 [ISIS Stowage Drawer]	1 ISIS Drawer	LAB1S4_L2		See Swap Tab - ISIS	71.04	
			See Swap Tab - ISIS	726.1	CEVIS ERGOMETER ASSY [old] [s/n 1002]	1	LAB1P3 (installed on CEVIS)		See Swap Tab - ISIS	59	
			See Swap Tab - ISIS	726.2	ERGOMETER DISPLAY CABLE ASSY [old] [s/n 1002]	1	LAB1P3 (installed on CEVIS)		See Swap Tab - ISIS	1.50	
	3	☑	See Swap Tab - CGBA	727	CGBA-2	1	LAB1P2_B2		See Swap Tab - CGBA	31.04	

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STS-118/13A.1
Return

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
				728	CRACK REPAIR	3.0 CTB	AS08		SF13	77.78	**Do not transfer to ISS; this CTB is up/down in SH (ref item 130).** **STS contingency use only
				729	EPO	1.0 CTB	FC07		FC07	39.30	**Do not transfer; this CTB is up/down in SH (ref item 132).** **This CTB will return with bags of seeds only. **Verify bag of seeds removed for EPO activities has been restowed prior to strapping to bulkhead.
	7	☑		730	Interface Heat Exchanger [HIGH LOAD HEAT EXCHANGER] [old]	1 foam box	NOD1P1		PF01	87.50	**Ref photos in REF tab showing packing config in MESS rack. **Retrieve old HLHX and remove all foam and tape on it. Remove foam/tape and place in a mesh bag (from NOD1D4_B2) and stage for return in Bag G in MDDK. Place old HLHX in empty ascent HLHX foam box and stow in MESS Rack.
	0	☑		731	LATE INSPECTION HARDWARE	0.5 CTB	FC12		FC12	20.09	**Do not transfer; this CTB is up/down in SH in this location (ref item 134).** **STS contingency use only.

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STS-118/13A.1
Return

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
				743	Return Bag 743 ~~ANITA AIR FLUSHING UNIT~~	3.0 CTB	SF14	NOD1D2 Port Side	AC04	6.20	**This bag launched containing ANITA Air Flushing Unit (ref item 184) .
				743.1	EVA Tools 2	1 mesh bag		Equipment Lock	AC04		**Configured per EVA TOOL PREP FOR TRANSFER TO SHUTTLE and transferred per EVA TOOL TRANSFER TO SHUTTLE. **Leave all contents in mesh bag when stowing in 3.0 CTB. **Ref dwg in LAYOUTS tab.
			See Swap Tab - ISIS	744	Return Bag 744 ~~SAMPLE/PURGE KIT-1~~ ~~24x24" ZIPLOCK BAG-2~~ ~~CWC-1~~ [empty 0.5 CTB]	0.5 CTB	FC11	MDDK	See Swap Tab - ISIS	2.76	**This CTB launched at FC11 (ref item 133) and was emptied during docked ops.
				745	Return Bag 745 S-Band Transponder - 1 ~~MISSE PEC Inner Bag - 2~~ ~~24"x24" Ziplock Bag - 4~~	1.0 CTB	PF16	NODE	AC13	42.76	**CTB carried up new transponder (ref item 160) and was temp stowed in NODE. CTB will contain old transponder for return (ref item 745.1).
				745.1	S-BAND TRANSPONDER [old]	1		Equipment Lock	AC13 (in 1.0 CTB)	42.76	**Retrieve from equip lock after EVA3 and pack in foam/CTB from new transponder (ref item 745) temp stowed in NODE.
	7	☑	See Swap Tab - SAFER	746	SAFER [old, s/n 1003]	3.0 CTB	A/L1 Crewlock (SAFER STOWAGE BAG S/N 1012)		See Swap Tab - SAFER	93.93	
	7	☑	See Swap Tab - Window	747	SCRATCH PANE ASSEMBLY [old]	1 foam box	LAB1D3 installed		See Swap Tab - Window	17.80	

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STS-118/13A.1
Return

Chg Flag	FD	☑	Crew Initials	Item #	Item Name	Qty	Initial Stowage	Temp Stowage	Stowage at Undock	Wt (lbs)	PROCEDURES/**Constraints/** **Comments
			Spacehab Return Realtime Additions								
X				802	Return Bag 802 [1.0 CTB s/n 1344]	1.0 CTB	NOD1D2		ACO5	8.5	**Retrieve empty 1.0 CTB (s/n 1344) from ISS.
X				802.1	PWR [s/n 1018]	1	A/L1D1_A2		ACO5 (in 1.0 CTB)	1.3	**Before packing for return, stow PWR in empty 24x24 ziplock retirieved from Subsystem Stow 5 at AC11.
X				802.2	Potassium Citrate/Placebo Kit [s/n 1036]	1 ziplock	LAB1S4 rack front		ACO5 (in 1.0 CTB)	3.2	

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FD 7 MMT Summary

The FD7 MMT met to review mission progress, Damage Assessment Team analysis, Team 4 status, and SRB, ET and SSME preliminary post launch assessments.

Cryo margins: The cryo margins above the 14+2 mission duration are 3 days 2 hours at SSPTS power levels and 1 day 22 hours at non-SSPTS power levels. These margins assume 95 lbs of O2 is transferred to ISS later in the mission.

Transfer Ops: Transfer operations are on schedule with approximately 60% of the middeck and 40% of the Spacehab transfers complete. Also, a total of 35 lbs of N2 was transferred to the ISS with no additional N2 transfer planned.

EVA: During EVA 2, EV1's CO2 sensor failed. Unless the sensor resumes nominal function, the EMU has lost CO2 monitoring capability. Per Flight Rules the EMU is GO for EVA with the crew monitoring for CO2 symptoms.

WLE Sensors: No new on orbit WLE indications occurred in the past 24 hours.

Ascent Imagery Team Final Report: As with the RCC inspection, the ascent imagery team has been extremely busy over the last six days with a total of 786 total observations. A few of these observations include: debris at 112.5 seconds appearing near the LH2 umbilical and falling aft with a possible body flap impact; a debris release at 28 seconds near top of the LO2 feedline; and at 114 seconds there is a debris particle spray with more than the usual amount of debris for this timeframe. Finally, at 121 seconds, several pieces of debris appear from the ET attach structure and then move under the left wing.

SRB, SSME, and ET Post Launch Assessments: The SRB, ET and SSME Projects provided their preliminary post launch assessments at the FD7 MMT. In general each of these elements performed very well during ascent. In particular the AHMS controllers which were active on each SSME performed nominally with no Failure IDs posted for any of the accelerometers. Detailed vibration data review using the accelerometer data recorded Modular Auxiliary Data System data will obtained post flight.

The ET team continues to investigate the LO2 feedline bracket foam loss including any near term modifications that could be implemented for STS 120 and subsequent flights. The size of the foam that caused the tile damage is estimated to be a 4.0" x 3.8" x 1.8" piece with a mass of 0.021 lbm, which is less than the 0.37 lbm foam allowable in this area. A total of eight foam losses (all less than the debris allowable) were noted in and around the LH2 and LO2 feedlines. Five of the eight are attributable to cryopumping and one is due to void delta P. The two remaining are thought to be due to mechanically induced cracking during pre-launch ice formation between the feedline and the bracket followed by ascent vibration/feedline motion.

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Debris Assessment Team: The Debris Assessment Team provided the preliminary thermal and stress analysis for the largest tile damage along with the final analysis results for the three downstream smaller damage sites. The smaller damage sites were cleared for entry with no more than a 10 degree Fahrenheit increase in structural temperatures for the wing skin beneath these damage sites assuming a Mach 16.5 transition to turbulent flow due to the larger damage site.

The preliminary results for the two bounding cases were reviewed at the MMT today. Case 1 contained a simplified geometry shown in Figure 1 where the void does not extend to the filler bar. This case is thought to represent the heat load expected in the actual cavity. Case 2 shown in Figure 2 contains a simplified geometry with a 0.2" x 0.7" strip of filler bar exposed which is representative of the flight damage. Results for both cases are somewhat encouraging, although QA and peer review of the analysis is still in work.

The preliminary Case 1 analysis shows that structural skin temperatures meet all shuttle requirements. The maximum structural temperature is 268 degrees Fahrenheit with an aluminum limit of 350 degrees. The fact that the damage site is located on a structural rib is beneficial for both structural margins and heat dissipation. Case 2 evaluates the temperature on the exposed filler bar and immediate aluminum structure. Preliminary results are favorable and show that the aluminum gets to about 325 degrees for about three minutes with a temperature limit of 350 degrees. This analysis is thought to be somewhat conservative because previous flight damages have always returned with some filler bar and of course the RTV attached to the filler bar. This analysis was being peer reviewed as well with an independent NESC review of the results underway.

Additionally, CFD analysis has been completed and is still under peer review for flow inside the cavity (See Figure 3). At the end of the cavity (downstream), there is a blunt wall that will see the highest heating at the surface of the impact. This can be seen in the red flow (highest enthalpy relative to free stream enthalpy) and is supported by actual flight damages that were inspected post landing. The upper part of the rear edge of the cavity always sees the highest heating because most of the flow does not dip into the cavity since the lower pressure remains near the surfaces (higher pressure in the bottom of the cavity) The flow inside the cavity is turbulent and follows the streamlines in the figure with minimal flow expected in the very deep part of the cavity.

All of this analysis data will be cross checked with Arc Jet runs. A baseline run to undamaged tile was performed last night and a baseline run to damaged tile is being run tonight. The data from these runs will be compared to the analysis in order to verify the thermal results. In addition, a damaged tile sample will have STA-54 applied in a thermo-vacuum chamber, cured for 24 hours and then available for Arc Jet testing if that becomes necessary. A final decision regarding whether a repair of this damage is required is not expected until the FD8 or FD09 MMT.

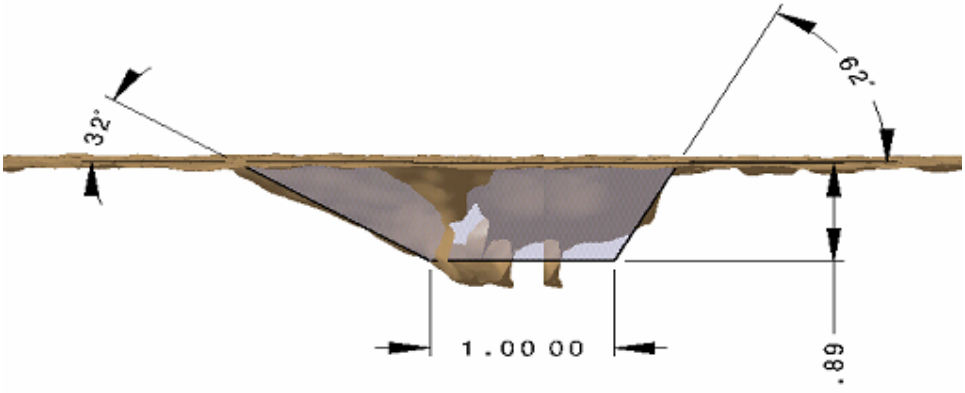

Figure 1 - Case 1 Overall cavity heating model dimensions

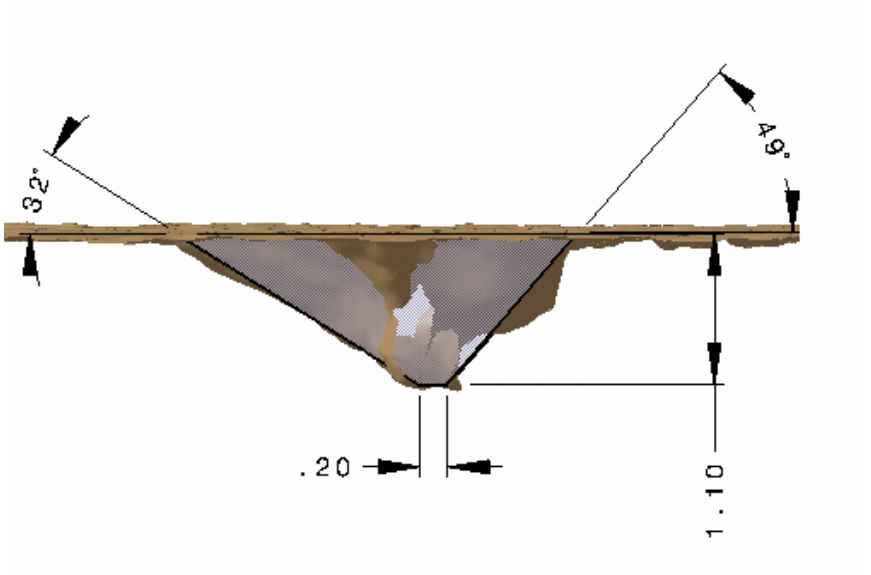

Figure 2 - Case 2 localized heating model dimension

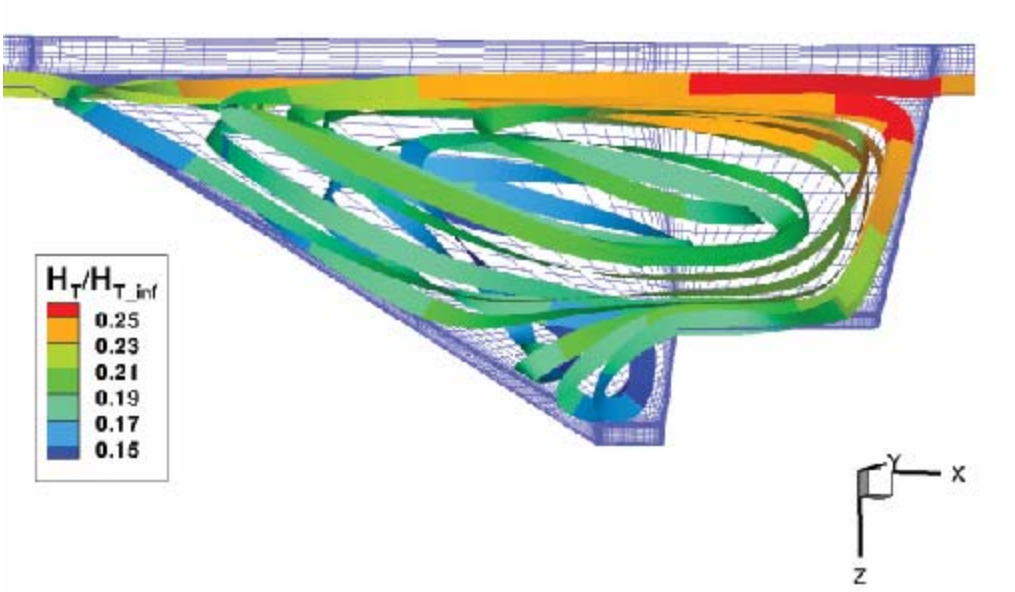

Figure 3 CFD Modeling of Cavity Flow/Enthalpy

Team 4 Activities: As a parallel effort, Team 4 has begun creating EVA and robotics procedures and associated timelines for a repair should that be required on EVA 4. These Team 4 activities include a 1-G session on FD 7 to develop techniques for Emmittance Wash and T-RAD application. The tool setup in the NBL was also completed on FD7 and an NBL run will be performed on FD 8 to integrate the robotics, tool exchanges between EV crewmembers, and other EVA details. A FD 8 glove box run will also be performed using T-RAD.

The preliminary timeline is very flexible and allows for decisions to be made as the analysis matures. The preliminary timeline moves EVA4 to FD11 to allow more time for MCC procedure development and crew review prior to performing the repair with T-RAD and emmittance wash. In the event that the tile repair is required the data package and procedures would be uplinked on FD 9 for your review and preparation.

Moving the EVA to FD 11 would also allow the MMT the option of canceling the tile repair and pressing on with the nominal EVA 4 on FD11, with a final decision on FD 9 for the GO/NO GO for repair or nominal EVA 4. The decision on whether the timeline will be adjusted to move EVA 4 to FD 11 will be made at the FD8 MMT. The prime factor that will drive this decision will be the maturity of the thermal, stress and CFD analysis and arc jet testing and whether this analysis can be used to definitively rule out the repair for the remainder of the mission.

MSG 071B - LIOH EXCHANGE DETAILS

Perform the following Transfer List items per the Swap tab:
Items 749, 181, 750, 751, 178, 752, 718

Perform the following Transfer List item from the Resupply tab:
Item 135

This will complete all LiOH Exchange and transfer for the STS-118 mission. Following is a list showing the expected Entry Stowage locations.

Orbiter:
MD52M (LiOH Box)*: STS-118 Cans 10 - 31
STS-114 Cans 9, 12, 14 - 20

*2 LiOH cans installed in LiOH slots A and B

SpaceHab:
PF25: STS-118 cans 1 - 3
PF17: STS-118 cans 4 - 6
PF18: STS-118 cans 7 - 9
AC15: STS-117 cans 1 - 3

ISS:
NOD1S4D2: STS-118 Cans 32 - 43
FGB: STS-118 Cans 44 – 61

LiOH Swap Activities: In hopes of simplifying stowing LiOH cans in the ISS Stockpile at NOD1S4_D2, we've provided a photograph of LiOH stowed in this location; please configure cans as they are shown in this photo – you may need to stow one can like the one designated with the green circle in the photo:

Challenger Center for Space Science Education, Alexandria, VA
Educational PAO Event Summary Message / Sequence of Voice Calls

Date:	FD 9 - Thursday, August 16, 2007
Start Event:	07/13:30 MET / 1206 GMT / 7:06am CT / 8:06am ET Orbit 120, TDRW
Duration:	20 min.
Location:	U.S. Destiny Laboratory
Participants:	*Flight Crew:* STS-118 Mission Specialists Rick Mastracchio and Barbara Morgan *Ground:* Dr. June Scobee-Rodgers and local area school children
Anticipated Topics:	1. Please see list of questions included after the voice protocols.
Notes:	1. TV required on Shuttle KU-Band downlink, with audio on A/G-2. 2. Check Endeavour/ ISS geographical location before event. 3. Check correct mic placement for optimal audio. **4. Please expect an audio delay of up to five seconds between your answers, the students receipt of your answers, and the next question.**

Shuttle Capcom:	Endeavour / ISS, this is Houston. Are you ready for the event?
Endeavour / ISS:	Houston, this is Endeavour / ISS. We are ready.
Shuttle Capcom:	Challenger Center, this is Houston. Please call Endeavour / ISS for a voice check.
Challenger Center:	Endeavour / ISS, this is Dr. June Scobee-Rodgers at the Challenger Center for Space Science Education in Alexandria, VA. How do you hear me?
Endeavour / ISS:	(reports voice quality. If acceptable…) We are ready for questions.
Challenger Center:	(Dr. June Scobee-Rodgers offers opening remarks, students conduct Question and Answer session, then…)
Endeavour / ISS:	(offers final thanks, then . . .)
Houston ACR:	Endeavour / ISS, this is Houston ACR. That concludes the event.
Shuttle Capcom:	Thank you, Challenger Center. Endeavour/ ISS, we are now resuming operational Air-to-Ground communications.

Time may not permit all of the questions to be asked.

1. How do you feel going into space for the first time? (Caesar Diaz, Challenger Learning Center of Lower Hudson Valley, Suffern, NY)

2. What is it like going on a spacewalk? (Hector Zepeda, Challenger Learning Center of the Southwest, Tuscon, Arizona)

3. How and where do you sleep on the space station and do you ever sleep-spacewalk? (James Pugh, Challenger Learning Center of Tallahassee, Florida)

4. How do you stay connected to the space station if there is no gravity in space? (Cameryn Miller, Challenger Learning Center-St. Louis, Missouri)

5. I am on a swim team for exercise and noticed that you also liked swimming. If an Olympic sized swimming pool could be built in space, would you be able to swim faster on earth or in space, and where would you burn the most calories? (Sarah Nakata, Challenger Learning Center of Brownsburg, Indiana)

6. How would you compare flying in space to flying on an airplane? (Layne Silverman, Buehler Challenger & Science Center, Paramus, New Jersey)

7. What is your favorite space food? (Jessica Miller, Challenger Learning Center at Prairie Aviation Museum, Bloomington, Illinois)

8. I am not good at science - what encouraged you to be an astronaut, and did you like science when you were a kid? (Peyton Gladieux, Challenger Learning Center of Lucas County, Ohio)

9. How do you brush your teeth in space? (Haleigh Pierce, Challenger Learning Center of San Antonio, Texas)

10. How will the experiments on the ISS help continue and further the mission to Mars? (Kelli Schlais, Challenger Learning Center of Oklahoma City)

11. Did you have a special teacher or mentor when you were a kid, and who was it and why were they special to you? (Maddy Lewis, Challenger Learning Center of Greater Washington)

12. What qualities does it take to be an astronaut? (Patrick Carroll, Challenger Learning Center of Kentucky)

13. Can you see constellations in space? (Emily Koch, Challenger Learning Center of the Southwest, Tucson, Arizona)

14. Which is more difficult: being in training or actually being in space? (Jordan Leek, Challenger Learning Center of Greater Washington)

15. What is your favorite experiment you have done about space and why? (Masayuki Nagase, The Museum of Flight, Seattle, Washington)

16. Have you made any mistakes in space? (Peter Sachs, Challenger Learning Center of Maine)

17. What simulations did you go through during training? (Donovan Simon, Challenger Learning Center of Northwest Indiana)

18. How do photos of space help you with your research? (Elliot Richardson, Challenger Learning Center of Hawaii)

19. How do you feel about the decision that Pluto is not a planet anymore? (Rachel Schlais, Challenger Learning Center of Kansas)

20. Why is Earth the only planet with people? (Noah Raven, Challenger Learning Center of Maine)

15-0770 (MSG 073) WETA ALIGNMENT GUIDE RECLOCKING

OBJECTIVE:
Reclock the WVS External Transceiver Assembly (WETA) alignment guide to allow proper installation during 13A.1 EVA4.

DURATION:
30 minutes

PARTS:
WVS External Transceiver Assembly (WETA) P/N SEG16103320-301, S/N 1003

TOOLS:
Comfort Gloves
DCS 760 Camera
ISS IVA Toolbox:
Drawer 2:
Ratchet, 3/8” Drive
(40-200 in-lbs) Trq Wrench, 3/8” Drive
Drawer 3:
#10 Long Torq Driver, 3/8" Drive

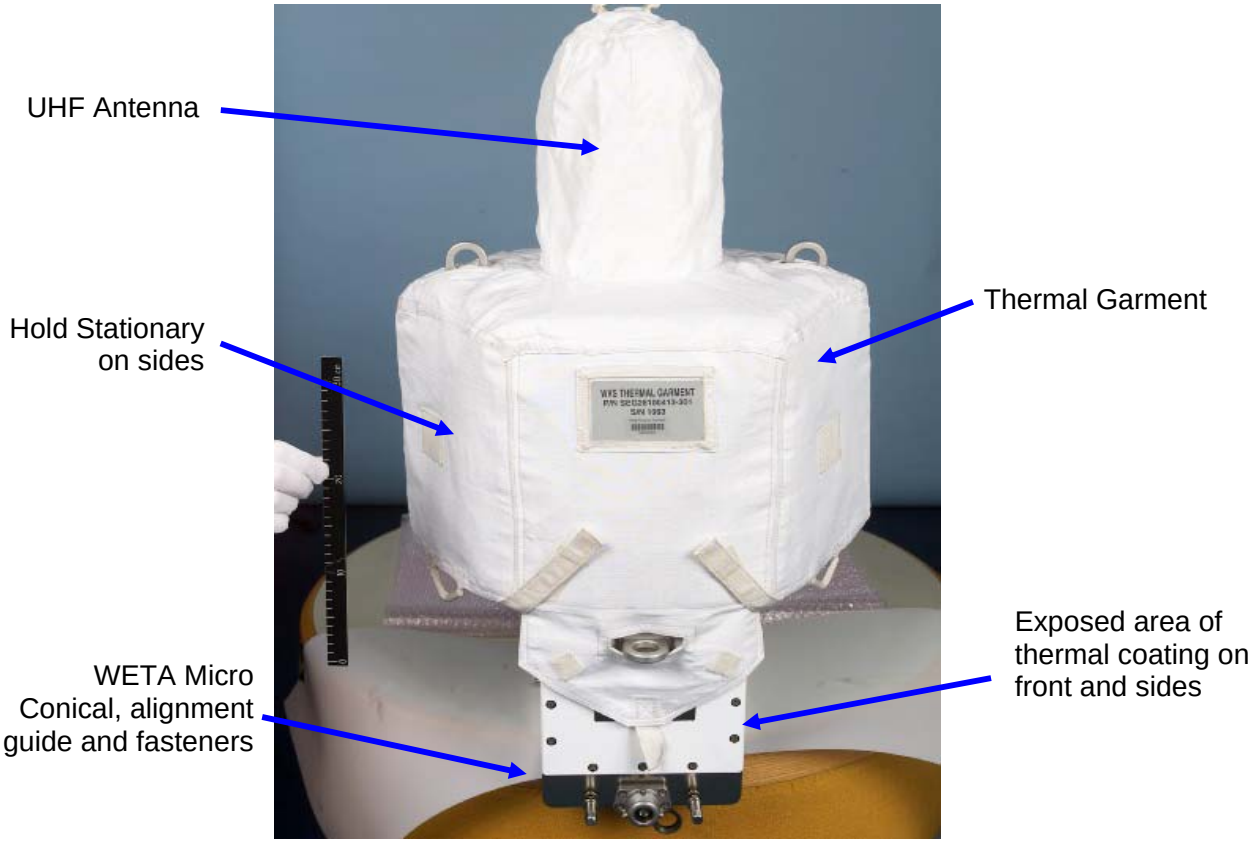

Figure 1. - WVS External Transceiver Assembly (WETA).

CAUTION
Use care handling WETA around exposed thermal coating and UHF Antenna to avoid damage to thermal surfaces and hardware. Comfort Gloves may be used to prevent damage.

1. Don Comfort Gloves,
   Remove WETA from outer bag, using care not to hold by UHF Antenna or touch exposed thermal coating.
   Refer to Figure 1.

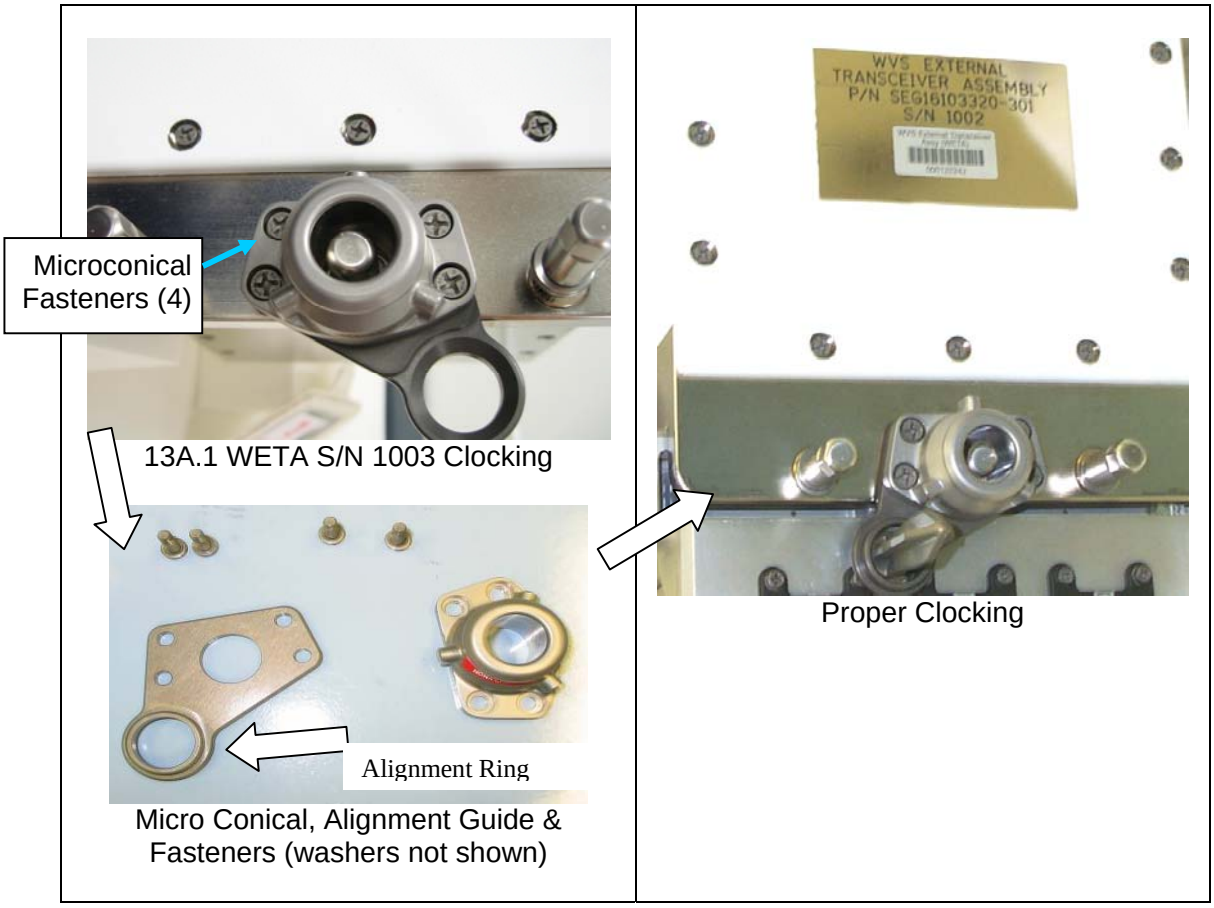

Figure 2. - WETA Alignment Guide Clocking.

2. Loosen, remove non-captive fasteners (four), washers (four), Micro Conical, Alignment Guide from WETA (Ratchet, 3/8” Drive; #10 Long Torq Driver).

3. Flip, reclock Alignment Guide such that alignment ring is on the left side when facing the Micro Conical fitting.
   Refer to Figure 2.

4. Install, tighten non-captive fasteners (four), washers (four) onto WETA Alignment Guide, Micro Conical, torque to 64 in-lbs (Ratchet, 3/8” Drive; #10 Long Torq Driver; (40-200 in lbs) Trq Wrench, 3/8” Drive).

5. Photo document (DCS 760 Camera).
   Replace WETA outer bag and stow in transfer location.
   Doff Comfort Gloves, discard.
   Inform **MCC-H** of task completion.